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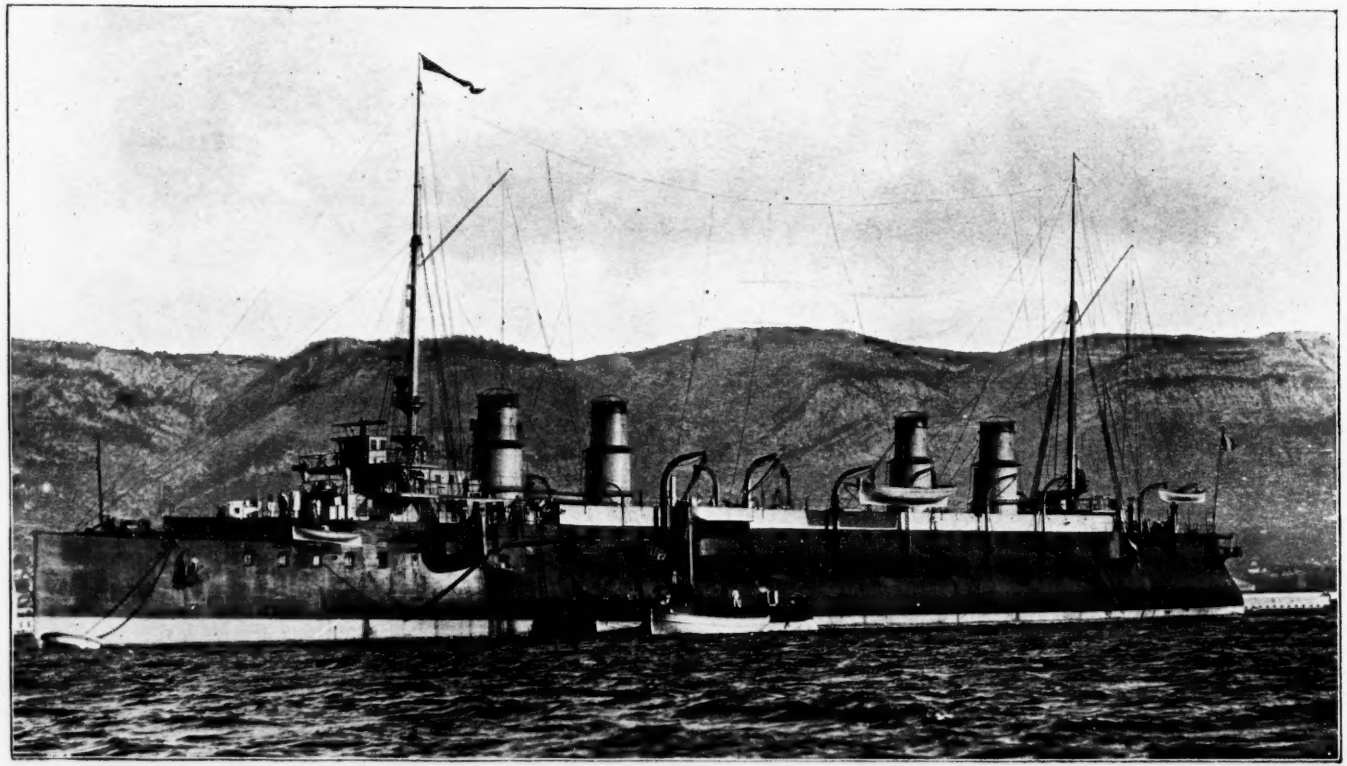

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THE FRENCH IN NEWFOUNDLAND.

By Major-General R. L. DASHWOOD.[1]

Wednesday, February 15th, 1899.

Vice-Admiral Sir WILLIAM R. KENNEDY, K.C.B., in the Chair.

The CHAIRMAN:—Ladies and Gentlemen, I have much pleasure in introducing to you Major-General Dashwood, who is going to give us a lecture on Newfoundland. It may seem strange to some of us that this subject, which is purely a nautical one, should be dealt with by a soldier, but I know no one more qualified to deal with the subject than Major-General Dashwood. During many years that he has spent in the colony, he has devoted himself not only to sport, in which he is an undoubted authority, but he has also mastered the intricacies of what is so wrongly called the French shore question, a matter which has vexed our diplomatists, and taxed the temper and tact of naval officers, for many years past. Having served for three years on the fisheries myself, as senior officer, it is a subject of very great interest to me, as it must also be to many officers present, who have also served on that station. The question remains, although many years have passed since I was there, very much the same, and the difficulties of settling it still remain. Happily a Commission has lately been appointed to enquire into the grievances of Newfoundland, and it is to be hoped that an arrangement will be arrived at satisfactory to all concerned, namely, the French colonists and ourselves. With these remarks I will ask General Dashwood to proceed with his lecture.

LECTURE.

I HAVE, as the Chairman has informed you, had great facilities for becoming acquainted with the question now before us, as I have spent many summers and autumns in the Island of Newfoundland in the last 30 years, and know well the coast line and also the interior.

My object in giving this lecture is in the interests of the people of the colony, more especially of the poor fishermen, to show how they have been treated by the British Government for the last 100 years and more.

The italics in the printed part of the lecture are my own, the quotations from despatches, opinions of the law officers, etc., are from

[1] This lecture has been condensed for printing by direction of the Council since it was delivered.

official sources, and will mainly be found in a Foreign Office Memorandum, dated March, 1866, and July, 1873.

Prior to 1713 the French had made certain lodgments in the island, especially at Placentia, which they had fortified, and on one occasion they marched a force from that place to St. John's, which city they captured, but shortly after were driven out and defeated by a British expedition.

By Article XIII. of the Treaty of Utrecht, 1713, it was agreed that "The island called Newfoundland, with the adjacent islands, shall from this time forward belong of right *wholly* to Great Britain, and to that end the town and fortress of Placentia, and whatever other places in the said island are in the possession of the French, shall be yielded and given up. . . . .

"Nor shall the most Christian King, his heirs and successors, or any of their subjects, at *any time thereafter lay claim to any right to the said island and islands, or to any part of it or them.*

"Moreover it shall not be lawful for the subjects of France to *fortify* any place in the said island of Newfoundland, or to erect any buildings there *besides stages made of boards, and huts necessary and usual for drying of fish*, or to resort to the said island beyond the time *necessary for fishing and drying of fish.* But it shall be allowed to the subjects of France to catch fish and to dry them on land in that part only and in no other," which the treaty goes on to describe is between Cape Bonavista and Point Riche, going round by the north of the island. The French at this time produced a map wherein Point Riche was put at Cape Ray; however, this was a mistake, which was fortunately discovered by a British admiral.

By Article V. of the Treaty of Paris, 1763, it is stated that "The subjects of France shall have liberty of *fishing* and *drying* on a part of the *coasts* of the Island of Newfoundland, such as it is specified in Article XIII. of the Treaty of Utrecht." By this treaty also the Islands of St. Pierre and Miquelon were ceded to France "to serve as *a shelter to* the fishermen." But the French King "engages not to fortify the said islands, to erect no buildings upon them but for the convenience of the fishery; and to keep upon them a guard of 50 men only for the police."

By the Treaty of Versailles, 1783, the right of the British to Newfoundland and the adjacent islands, as laid down in Article XIII. of the Treaty of Utrecht, is maintained. The Islands of St. Pierre and Miquelon are ceded to the French, and the French "fishermen are to enjoy the fishery which is assigned to them by the present article, as they had the right to enjoy that which was assigned to them by the Treaty of Utrecht," and by this treaty, "in order to prevent the quarrels" which had arisen between the French and English between Cape Bonavista and Cape St. John, in consequence of the numerous British settlers on that part of the coast, the French gave up the right to fish between those points, and in lieu thereof the treaty shore was prolonged from Point Riche to Cape Ray.

And by a Declaration of his Britannic Majesty, dated September 3rd, 1783, it was declared:—

"To this end and in order that the fishermen of the two nations may not give cause for daily quarrels, his Majesty will take the most positive measures for preventing his subjects from *interrupting in any manner by their competition* the fishery of the French during the *temporary exercise* of it, which is granted to them upon the *coasts* of the island of Newfoundland; and he will *for this purpose* cause the *fixed settlements* which shall be formed there to be removed, and his Britannic Majesty will give orders that the French fishermen be not incommoded in cutting the wood necessary for the repair of their scaffolds, huts, and fishing-vessels.

"The Article XIII. of the Treaty of Utrecht, and the method of carrying on the fishery which has at *all times been acknowledged* shall be the plan upon which the fishery shall be carried on there, it shall not be deviated from by *either party;* the French fishermen building only their scaffolds, confining themselves to the repair of their fishing-vessels, and not wintering there; the subjects of his Britannic Majesty on their part not molesting in any manner the French fishermen during their fishing, nor injuring their scaffolds during their absence.

"The King of Great Britain in ceding the Islands of St. Pierre and Miquelon to France, regards them as ceded for the purpose of serving as a *real shelter* to the French fishermen and in full confidence that these possessions will not become an *object of jealousy* between the two nations." A counter Declaration was made by the French King on the same day. But as pointed out by the law officers on 24th March, 1859, it was signed after the British Declaration, with which the King of France declared "he is fully satisfied."

By the Treaty of Paris, 1814, the French right of fishing "*upon the coasts*" of the Island of Newfoundland and adjacent islands in the Gulf of St. Lawrence, was replaced upon the same footing in which it stood in 1792.

This enactment was maintained by the Treaty of Paris of 1815.

Under the above Treaties and Declarations the French now make the following claims:—

1. An exclusive right of fishery on the treaty shore.
2. That all fixed British settlements of whatever nature on that portion of the coast are contrary to the treaty, and that the French have the right to demand their removal.
3. The right to catch fish of all descriptions.
4. The right to take salmon and other fish in the rivers, both in the fresh and salt water.
5. The exclusive right to the shore for half a mile from the sea.
6. The right to exercise jurisdiction on the treaty shore as regards what they may consider breaches of their treaty rights by the British fishermen.
7. The right to set up lobster factories on the treaty shore, and to grant concessions to their subjects to carry on that industry.

Now as regards the claim of exclusive right to fish. It appears "from the archives of the Foreign Office," that between 1713 and 1780, "that is to say from the Treaty of Utrecht to the breaking out of war in 1780, the rights enjoyed by the French were '*concurrent*' only, and the attempts made from time to time by the latter to induce the British Government to make their rights exclusive had been successfully resisted."

It also appears that Mr. Fitzherbert at the time of the making the Treaty of 1783 and the Declaration, refused to concede the exclusive right of fishing demanded by France, but promised that the French should not be "molested."

Mr. Fitzherbert, in a further despatch of May 4th, 1783, "stated that M. de Vergennes continued to urge the insertion of such words in the Declaration as would secure the *exclusive* right of fishery to the French.

"This attempt to obtain exclusive rights was, however, resisted," and "it will be observed that neither the Treaty of 1783 nor the Declaration annexed thereto confers any exclusive rights of fishery upon the French."

In addition, the very wording of the Declaration which says "it shall not be deviated from by *either party*" shows clearly that both nations were to fish. In fact, prior to the Declaration, the rights of the French were "not only concurrent but equal." After the Declaration, concurrent without interruption, which gave the French more or less a pre-emption. Governor Darling, in a despatch to Mr. Labouchere in 1856, states that several proclamations of Governors between the years 1763 and 1783 speak of the French rights as "rights in common."

In 1818, the same rights of fishing were given to the people of the United States, nor did the French interfere with them. It was remarked by a British naval officer, Commander Knowles, in his report, that the French naval officers interfered with the English, while they let the Americans alone.

Lord Palmerston, in a despatch dated Foreign Office, July 10th, 1838, in reply to Count Sebastiani, who claimed, on the wording of the Declaration, an exclusive right of fishing, among other things, says:—

"The Treaty of Paris of 1814 declares that the French right of fishery at Newfoundland is replaced upon the same footing upon which it stood in 1792.

"In order therefore to come to a right understanding of the question it will be necessary . . . to ascertain what was the precise footing upon which the French fishery actually stood in 1792.

"Now it is evident that specific evidence would be necessary in order to show that the construction which the French Government now desire to put upon the Declaration of 1783, is the interpretation which was given to that Declaration at the period when the Declaration was framed, and when the real intention of the parties must have been best known. It would be requisite for this purpose to prove that upon the conclusion of the Treaty of 1783 French subjects actually entered upon the enjoyment of an exclusive right to catch fish in the waters *off the coast* in question . . .

at the commencement of the war in 1792; but no evidence to such effect has yet been produced . . . and moreover it does not appear that such right was claimed by France, or admitted by England, at the termination of the war in 1801, or at the Peace of 1814."

And referring to the prohibitory proclamations of the English Governors after 1783, which were issued "from time to time on occasions when it was found that British subjects while fishing within the limits in question, have caused interruption to the French fishery," Lord Palmerston says that "neither in the Act of Parliament of 1788, passed for the express purpose of carrying the Treaty of 1783 into effect, nor in any subsequent Act of Parliament relating to the Newfoundland fishery, nor in any of the instructions issued by the Admiralty or Colonial Office, nor in any proclamation which has come under my view, issued by the Governor of Newfoundland, or by the British admiral upon the station, does it appear that the right of French subjects to an exclusive fishery, either of cod-fish or fish generally, is specifically recognised."

And, in conclusion, he adds ". . . . exclusive rights are privileges which, from the very nature of things are likely to be injurious to parties who are thereby debarred from some exercise of industry in which they would otherwise engage, such rights are therefore certain to be at some time or other disputed, if there is any maintainable ground for contesting them; and for these reasons when negotiators have intended to grant exclusive rights, it has been their invariable practice to convey such rights in direct, unqualified and comprehensive terms, so as to prevent the possibility of future dispute or doubt. In the present case, however, such forms of expression are entirely wanting, and the claim put forward on the part of France is founded simply upon inference, and upon an assumed interpretation of words."

Such are the chief points in the celebrated despatch of Lord Palmerston, one of the few British statesmen who have really safeguarded our Imperial interests.

The law officers of the Crown were consulted at different periods as to the exclusive right to fish. They generally laid down that British subjects might fish on the treaty shore, provided they could do so without interrupting the French. Sir E. Lytton, in his instructions to the Newfoundland Fishery Commissioners in 1859, said, "The French right is therefore not that of an exclusive fishery, but that of a fishery free from disturbance by British competition." This is the claim made by the British Government up to the present time.

Fixed Settlements.

This hitherto has been the most difficult point of the treaties and Declarations, the French claiming that fixed settlements of any kind are contrary to the treaties, the English maintaining that the Declaration only referred to fixed fishing settlements, and that settlements of any other kind are not contrary to the Declaration. As a fact almost every settlement on the treaty shore is more or less a fishing settlement.

Now, in order to get any clear idea of what was really meant to be granted to the French by the undertaking to remove "fixed settlements," and the causes that led to such undertaking, it is necessary to refer to historical facts, which appear to have been overlooked in dealing with this question since the treaty of 1815, by Secretaries of State and law officers of the Crown.

Up to the breaking out of the war in 1783 the fishery was a ship fishery—that is to say, was carried on almost entirely by fishermen from France and England who came to Newfoundland for the season only, and then returned home. Up to that date permanent settlement by the British was not only discouraged, but contrary to the law of the colony. The fishery appears to have been considered a sort of preserve for certain English adventurers. The master of the first British vessel to arrive in any bay in the spring became the "fishing admiral," as he was termed, for that bay for that season only. He had the right to choose any portion of the beach he liked on which to establish his "room," as it is called, that is, the area on which he erected his stages and scaffolds for drying and curing fish (cod). These stages are practically a wharf built out over the water, the lower part used for splitting the fish preparatory to salting and drying; the heads and offal being thrown into the sea. Above are poles forming a kind of wooden gridiron, on which the fish are spread to dry. The fishing admiral had also jurisdiction to settle disputes, and other vessels as they arrived chose places for their "rooms." It was first come first served.

But the possession of a certain place one year did not carry possession for the next. On this head Chief Justice Reeves in 1793, before a committee of the House of Commons, stated, "Ships' rooms and all vacant and void spaces which may be turned into ships' rooms, by those who choose to occupy them are in common for the first taker, who may possess one for the season, at the end of which he must leave it . . . . for some other person the next season." The above rules existed also on the treaty shore, where the French fished in common, but the control of these fisheries was up to 1783 in the hands of the British.

It appears that even at this date British subjects had settled on the treaty shore, especially between Bonavista and Cape St. John, which was the cause of the French limits being altered, the French complaining that these settlers on the plea of private ownership, and being on the spot before the French ship fishermen had arrived on the coast, obstructed the French in their fair choice of "rooms" on their arrival. It was against such unequal conditions that the French protested. For the Declaration says "*and for this purpose*," viz., to prevent *interruption* by the British. (This is clear by the context.) "His Majesty will cause the fixed settlements that shall be found there to be removed." Therefore it may be maintained that even at that time, *all* fixed settlements which did not actually interrupt the French fishery were *not* contrary to the Declaration, non-interruption being the pith of that document.

After the treaty of 1783 a number of the settlers on the treaty shore, who had gone there during the war, were removed without compensation,

some to the inhospitable coast of Labrador, where Newfoundland history states many of them starved to death! What a disgraceful chapter in the history of this country!

"During the period of war between 1793 and 1815, the French having been totally excluded from the fishery, many British settlers established themselves within the former French limits," and at the Peace of 1815 the old order of things no longer existed but had entirely changed. There were then no ship fishermen from England; the fishery was carried on on the part of the British entirely by settlers. The Declaration gave to the French a pre-emption as to choice of fishing places and areas for drying, etc. The reasons for which the fixed settlements were to be removed, therefore, no longer existed. That part of the Declaration was practically dead, and has never since been acted on.

The French on being granted their former rights in 1815 did not insist upon the removal of these fixed settlements, but made use of their occupants to guard their boats and other gear during their absence, which, contrary to the treaties, they left behind. They also made such so-called toleration on their part an excuse for extending their fishery to Labrador and Belleisle north, and they took possession of the salmon fisheries up the rivers, exported wood to St. Pierre and Miquelon, and erected permanent establishments, all of which acts were contrary to the treaties; but of which it appears for some years the British Government took little or no notice.

The British population on the treaty shore at the present date is over 13,000, of whom over 99 per cent. are native-born.

The Right to Catch Fish of any Kind.

Now, although the word "fish" appears in the treaty, and not "cod," yet the wording of the treaty where it refers to stages, etc., for the *drying* of fish is incompatible with that of any other fishery but that of a cod fishery, as neither salmon nor lobsters are dried. In addition, at the time of the Treaty of Utrecht no other fishery was carried on commercially, and the word "fish" in Newfoundland has from time immemorial meant "cod" only. If a man wishes to ask about salmon, herring, or any other kind of fish, he alludes to them by name. Admiral Sir Hugh Palliser, governor of the colony in 1763, stated the French fishery right included a *cod fishery only*, and gave no right to catch salmon. This view is also held by the colony, but the British Government seem to take the view that fish of any kind are included, although Count Sebastiani, in a communication to Lord Palmerston in 1836, speaks of a *cod* fishery.

It has been affirmed that the word in the draft of the treaty of 1713 was "cod," but that "fish" was substituted, as giving a greater purity of language. The original treaty was in Latin: "Piscaturam exercere et pisces in terra exsiccare permissum erit" are the words used; literally, to exercise a fishing, to carry on a fishery. There is no doubt but what the fishery to be exercised was a cod fishery only, and this point should be

vigorously maintained by our Government. Some 40 years ago there was an action tried in the highest Courts of Newfoundland, which depended on the meaning of the word "fish," and it was decided that "fish" in Newfoundland meant "cod" and nothing else.

The Right to Take Salmon in the Rivers, both in the Fresh and Salt Water.

This right is denied by the British Government. The fishery in the treaties is described as on "*the coasts*," which is not up the rivers. The law officers of the Crown concurred (1859) in the view taken by Lord Clarendon respecting fishing in the rivers especially for salmon, "that they are not within the scope of the Treaties and Declarations, and that the French have no right thereto, nor to fish in any of the rivers or mouths of rivers in Newfoundland."

The (Practically) Exclusive Right to the Shore for a Distance of Half-a-Mile from the Sea.

The French claim that the British have no right to occupy a yard of land or erect any building within the half-mile limit, on the plea that such occupation may interrupt their fishery; also that the British are not at liberty to enquire into the *bona fides* of such alleged interruption, which "may be a mere contrivance to get rid of an inconvenient population"; the French claim that they are to be the sole arbiters as to what constitutes an interruption—to be judge and jury, in fact—a virtual claim to territorial sovereignty of the shore; a claim which Mr. Waddington in 1886 actually made when he maintained that this right to the shore "was vested in them as part of their ancient sovereignty of the island which they had never relinquished." Such a claim is absolutely untenable, as it is directly at variance with the text of the Treaty of Utrecht, which debars the French from claiming "*any right to the said island*," etc.

"At most the French, by the treaty stipulations, have a right only to the shore which they can use," or *bonâ fide* require to carry on their cod fishery. There is no mention in the Treaties or Declaration of the half-mile claimed by them.

Now the area occupied by a "room" in which fish caught, in say 10 miles of sea, are cured, dried, etc., would not be more than about 300 yards long and 200 wide. The "stages" are erected close to and partially over the salt water. At the present time there are only about seven French rooms in the 800 miles of coast that forms the treaty shore, if measured by following the indentations thereof. The amount they really require is therefore infinitesimal, considering the length of the treaty shore.

The most uncalled-for and groundless complaints of the French are included in their determined opposition to the erection of wharfs for the exportation of minerals and other produce, and especially to the opening of mines within treaty limits. The British Government has more or less given in to such complaints on the part of the French,

though, provided the opening of such mines or building of wharfs does not in any way interrupt the French fishery, it is hard to see the necessity of giving way to complaints that are really frivolous and unfounded, and the admission of which involves great hardship on the colony, and directly prevents its development.

As an example, in 1874 Mr. Fox Bennett opened a mine near St. George's Bay. He had not built a wharf, but had erected some buildings and got some ore to the surface. The French strongly objected. Commander Howorth, R.N., in his report states "That as these buildings were 12 miles from the nearest French fishing station, he could not conceive that the French can ever be injured by the prosecution of these most important works." But under pressure from the British Government Mr. Bennett closed down his mine. Two years ago another mine was opened at Point Bluff, 20 miles from any French fishing station, to which the French also objected, especially to a wharf there. And the British Government not many years ago actually forbade the building of a railway that was projected, because its terminus was to be on the treaty shore at St. George's Bay, and that French treaty rights might possibly be "affected," although no Frenchman had been near the spot selected for many years. At the present time there is a railway station at St. George's Bay. Other wharfs had been removed at various times by orders of the British authorities. Some have not been interfered with.

The Right to Exercise Jurisdiction on the Treaty Shore.

It is an axiom of international law that the sovereign power alone can exercise authority within its own limits. By the Treaty of Utrecht Great Britain was confirmed in the exclusive sovereignty of the entire island and adjacent islands; the French, therefore, cannot have jurisdiction on the treaty shore. In 1853 the Queen's Advocate laid down "That by the Treaty stipulations the French enjoy no right of jurisdiction within their fishery limits." Mr. Addington, in a despatch to the Admiralty in the same year, stated that "We altogether deny the right of the French to take the law into their own hands and to drive away English fishing-boats from the Treaty limits." In 1852 a British warship was stationed off the coast of Newfoundland to protect the British fishermen, because the French had taken the law into their own hands. Lords Clarendon, Cowley, Rosebery, and other Ministers have protested against such action on the part of the French; but it still continues! Though since our surrender on the lobster question, the French men-of-war have more or less ceased their aggressive acts, which prior to that date were very frequent. Some light is thrown on this by the instructions of Sir E. Lytton, who was at the Colonial Office in 1859, to the Newfoundland Fishery Commissioners, in which, whilst he fully admitted that the French had no right to take the law into their own hands, yet he goes on to say: "But Her Majesty's Government have to instruct you not to entertain any objection to such proceedings on the part of the French, etc." It was not until 1862 that three British men-of-war were, every fishing season, stationed off the treaty shore of Newfoundland to control

the fisheries. Such a task cannot be a very pleasant one, for it will probably be admitted that both sailors and soldiers are above all things lovers of justice and fair play; that being so, naval officers on the treaty shore would, no doubt, sometimes have a repugnance to carry out their instructions from Downing Street, when such orders, which they are bound to obey, press hardly and even unfairly on the fishermen of the colony, which sometimes they do, especially as the complaints made by the French men-of-war to ours as to alleged actions by the natives contrary to the treaty, to which our officers are obliged to pay attention, are frequently eventually found to be groundless and frivolous. In fact, if it was not for the tact displayed by our naval officers there would have been a serious disturbance on the coast long ago.

The Right to Set up Lobster Factories on the Treaty Shore and to Grant Concessions to their Subjects to Carry on that Industry.

The first British lobster factory erected on the treaty shore of Newfoundland was in 1882 at St. Barbe, another in 1883 at Port Sanders. Up to 1887 there was no protest against or interference with these factories, though some correspondence passed between the French and British naval officers on the subject. But in the latter year, after the passing of the Bait Act, a French man-of-war, without notice or formal protest, destroyed a number of lobster traps at the above-mentioned places. In June, 1889, a French war-ship destroyed traps at Port Sanders, and in July of that year, 500 traps at Meagher's Cove. The French senior naval officer, Captain Humann, also complained to the senior British naval officer that these lobster traps interfered with their fishing operations, viz., the catching of capelin for bait. These complaints turned out to be altogether frivolous, as capelin do not frequent the more or less rocky portions of the coast where lobster traps are set. Capelin come to the shore only on sandy beaches, where lobster traps are not set. As a further proof that these complaints were groundless, there are now some forty English lobster factories on the treaty shore, and some ten French, and no complaints whatever are made by the latter, that lobster traps interrupt their fishery.

In 1886 Lord Iddesleigh protested in advance to Mr. Waddington against the erection of lobster factories by the French; he said that "such a course is not allowed by the treaties and must be discontinued." It would have been well if our Government had stood to these words. Before 1888 the French objected to our factories on the plea that such industry interfered with their fishery, but in 1888 they set up the contention that they had the right (lobsters being fish within the meaning of the treaties) to take them and also erect factories to pack them. This they proceeded to carry out. In September, 1888, the Foreign Office addressed a note to France calling attention to the illegality of French lobster packing, and a further protest was made by Lord Salisbury early in 1889 "against an assumption of territorial rights in derogation of the sovereignty of the British Crown." Nevertheless, the French continued to

erect lobster factories. Lord Salisbury then suggested arbitration, but this very rightly was refused by the Colony; another attempt was made to go to arbitration before a court, that also failed. The British Government then without the consent, and against the wishes of the legislature, concluded a *modus vivendi*, which is in force up to the present date, by which all factories working on the 1st July, 1889, were to stand, both French and English, and no new ones were to be built by either party, without mutual consent.

The legislature protested most strongly against the *modus vivendi*, which gave the French a *locus standi* in any future negotiations to which they were not entitled, and the fact of its being made without their consent, they considered was practically an infringement of the promise made to them in 1857 by Mr. Labouchere, "that the consent of the community of Newfoundland is regarded by Her Majesty's Government as the essential preliminary to any modification of their territorial or maritime rights," nor was even the Government consulted as to the final form of the *modus vivendi*.

It is perfectly clear that at the time of the Treaty of Utrecht no such industry as lobster packing was ever contemplated or even dreamt of; it is still, if possible, more clear that the language used to describe "the fishery" in that treaty is utterly inapplicable to lobster catching and canning, as the words limiting the erection of buildings to "*stages made of boards and huts usual and necessary for drying of fish*" cannot by any ingenuity be made to cover a lobster factory, whether roofed by canvas, wood, or iron sheeting, with a boiler and furnace on a brick foundation, tinning apparatus and all the rest of it. As regards the lobster industry being an interruption of the French cod fishery, of course a lobster factory on shore cannot affect the capture of fish in the sea. Cod frequent deep water, lobster shallow water. Therefore lobster traps are not set in the places frequented by cod, neither is the capture of herrings, capelin, or squids interfered with by lobster traps. Provided, therefore, that the factory does not occupy the ground *bonâ fide* required by the French for their "rooms" or drying places, it cannot in any way interrupt them.

As to the French granting concessions to their subjects to build factories on the treaty shore, which they did in 1888, it was an audacious move, and a gross infringement of the treaties. The French also try to make out that our lobster factories are illegal, as coming under the head of fixed settlements, sedentary establishments, as they call them, that is to say, establishments that are permanent and occupied all the year round. Now as the lobster season is only in the summer months, there is no necessity for our people to remain in these establishments beyond that period, in which case they would not be fixed settlements, even allowing the French claims on that head, which we dispute.

With such a strong case, absolutely unassailable as far as the factories are concerned, it is a pity that our Government, who on this question showed great weakness, instead of giving way, did not say to France in effect: Your factories are absolutely contrary to the treaties, and must be removed.

We shall support our subjects in the lobster industry, provided they do not in any way interrupt your fishing operations. This stand should be made at the expiration of the *modus vivendi* which shortly takes place.

This *modus vivendi*, which has now lasted for eight years, bore especially hardly on those settlers who had not erected a factory by 1st July, 1889, for while the more fortunate people obtained a monopoly, the others, although they could catch lobsters, were prevented from packing them, and if they did so, their factories were destroyed; at the same time they saw the French with over a dozen factories, quite contrary to treaty, carrying on a lucrative business on British territory, from which they, British subjects, were precluded.

As at the peace of 1713, when we first gave rights to France, and also in 1814 and 1815, when we re-granted those privileges, we were the conquerors, surely we have a prior right over the French to interpret what it really was at that time we made them a present of.

Now there have been several attempts to make arrangements with the French as to their treaty rights on the island; since 1846 there have been eight. All these arrangements fell to the ground because the Colony very rightly protested very strongly against them, as they were very one-sided, and much in the interests of France rather than Newfoundland. The last arrangement, which I will explain to you—as more or less a sample of the remainder—was made in 1885.

It was at the end of 1883 that the British Government and the French Government arranged to try and come to some agreement; four Commissioners were to meet in Paris, two British and two French. The two British Commissioners were Mr. Clare Ford, of the Foreign Office, and Mr. Pennell, of the Colonial Office. The French Commissioners included a naval officer who had been years on the coast of Newfoundland. These gentlemen, Mr. Ford and Mr. Pennell, went to Paris, and at the end of two years they made a final arrangement. I will explain to you its provisions. I must first of all tell you what were the so-called concessions given to Great Britain. Great Britain was to be allowed on certain parts of the coast to have settlements other than fishing settlements. The British Government have always contended we had a right to have settlements which were not fishing settlements anywhere on the shore of Newfoundland, and as a matter of fact practically almost all the fishing settlements on the treaty shore of Newfoundland are fishing settlements. There are at present some 13,000 people there. We had these settlements everywhere, provided they did not actually interrupt the French in their fishery operations. Another thing is that the part of the coast, where we might have settlements, is what is known in the colony as the straight shore, that is to say, it is a shore of more or less perpendicular cliffs, where you could not land even in a canoe, devoid almost of harbours. The only harbours given to us worth much were in St. George's Bay, the Bay of Islands, and Bonne Bay, so that it was really no concession to us at all. Then, provided that mines were found in the part of the coast claimed by France, we were to be allowed to work them under certain very

stringent and hampering conditions. A British naval officer and a French naval officer might agree as to the site for the wharf (this gave the French a veto), and having done so, a wharf might be built on the shore; but all the paraphernalia connected with the mines, that is, dwelling-houses, shops, warehouses, etc., were to be placed at a distance of 800 yards back —in some few cases 500 yards—and were to be joined to the wharf by a railway fenced in. Some temporary shelters were allowed to be put within 15 yards of this railway for the provisional storage of minerals and tools. I do not hesitate to say that if the mines that are working and have been working in Newfoundland were hampered in that way, those restrictions would have added most enormously to their expense. To build a railway half a mile back on that precipitous rocky coast would be very expensive indeed. Not only that, but we have a right, and the British Government maintain that we have the right, to have settlements on any part of the treaty shore which are not fishing settlements, and therefore provided we do not interfere with the French, which we are not likely to do, we have a perfect right to have those fixed settlements. So this so-called mining concession did not give us anything worth having. As I have already observed, we have a right to any kind of settlement if it does not interrupt the French fishery.

Then the French gave up their claim to the exclusive right to fish. That claim they had no right to, and we have always exercised a concurrent right up to this date. Therefore we got nothing out of that.

Now I will explain to you the very solid concessions which on that occasion were given to France. In the first place, every single harbour of any value on the 800 miles of treaty shore, with the exception of the three I have mentioned, was granted them. These harbours, in fact, were to be practically reserved exclusively for the use of the French. It is quite true that in these harbours reserved, any British settlers living there at that time might be allowed to remain, but no new dwelling-houses were allowed to be built. That was a great concession to France, and a great blow to the Colony, because hitherto there had been nothing to prevent any settler building houses on any part of the shore, provided he did not interrupt the French. Moreover, it put an entire stopper to any increase of the British population on that part of the treaty shore.

Then the French said they abandoned the fishing in the rivers, but were to be allowed to fish as far as the water remained salt. Here they made a virtue of giving up what they had not the faintest right in the world to. Then this clause goes on to say, they (the French) are not to be allowed to put fixed barriers in the rivers capable of impeding the fish or navigation. Now, as far as the water is salt is up to the top of the tide, a considerable distance in some places, a mile or a mile and a half. The Newfoundlander is only allowed to fish with a net in the tidal waters, not in the fresh waters. He is also restricted to a certain extent by local laws with regard to the length of his nets, the size of the mesh, and the distance of nets from each other. The French would have been entirely exempt from anything of that kind, and, provided they left room for a boat, they might build a fishing weir, and they might have as

many nets as they liked one behind the other. In fact, that clause handed over to the French practically the entire control of every salmon river on the treaty shore. The Newfoundlanders would not be able to put nets in front of the French, because the French would be protected by the proviso of non-interruption. Putting a net in front of another man's net would certainly be interruption; all they could do would be, if there was room, to put their nets behind the French nets, and there would not be much chance of getting a fish in such a place. A good many of the settlers living on the estuaries and mouths of those rivers have added to their livelihood considerably by catching salmon; they might do a good deal more only the rivers are unfortunately considerably poached, and the cod traps outside are making great havoc with the salmon. These men have a sort of prescriptive right to certain salmon posts, as they are called. It very often has passed from father to son for generations. If this salmon clause had been passed, all the rights these men had enjoyed for years would have been swept away. This clause was a giving away of an important right exclusively held by the Colony.

The next clause gave the French the right to purchase bait at any time in the parts of the shore which are non-treaty. That was a very important concession indeed. That I will explain presently. Another clause allowed the French to import free of duty anything they liked. They were to pay no light dues or port dues. If the French were allowed, in the harbours where they have exclusive possession, to land tobacco and rum and all that sort of thing, it would circulate in the country, and every French harbour would be a hotbed of smugglers.

Then there was another clause which allowed to the French jurisdiction on British territory on the treaty shore, provided there was no English man-of-war in sight. Considering that the treaty shore is 800 miles long, and that there are only three British men-of-war there, it is not very often they would be found together, and the French generally cruise alone. Therefore the French had a right to exercise jurisdiction, to pull up and remove the nets and fishing gear of British settlers on the plea that they were interfering with French fishermen. They could also, if damage was done, either at sea or on shore, hold a court and assess the damage, and the report of that court was to be received as evidence in a British court of justice. This was depriving a British subject of what is the most sacred right he owns in every part of the earth, where he stands on British territory, that is to say, he is solely under the jurisdiction of his own people. It is a right every Frenchman has. We cannot try a Frenchman in France; why should a Frenchman be allowed to try an Englishman in Newfoundland?

By another clause the French were to be allowed to have two families per harbour—in large harbours two, and in small harbours one. This must be looked upon rather as the thin end of the wedge of colonisation, and in the Treaty of Utrecht it was very carefully provided against. The word "family" is rather an indefinite term. "Family" may mean a man and his wife and children, or all his relations. To judge from our previous knowledge of the French, they

would no doubt have put the more liberal interpretation on the word "family." I believe at the present moment the population of France is nearly stationary, but the climate of North America has, apparently, a peculiar effect on the French people who live in that part of the world, as it renders them extremely prolific—a baker's dozen is a common number in a French family in Quebec. I do not know that there is any reason to suppose but what the climate of Newfoundland would have a similar effect. You can judge for yourselves the number of people there would have been in those harbours in the course of twenty years, not to say thirty or forty, if they had been allowed to have one or two families there. These families must have had permanent habitations, and when they were not fishing in the winter, they would be competing with our settlers in catching furs (which are very valuable, especially that of the fox), shooting deer, and so on, although by the treaty the French had not the right to shoot even a musk-rat. In the course of forty years that part of the coast would have been to all intents and purposes a French colony.

Now, I hope I have made clear how valueless were the rights conceded to Great Britain and how exceedingly advantageous were those given to France; and, moreover, how very important privileges, exclusively owned by the Colony, were handed over in part or wholly to the French, without our receiving in exchange anything approaching to an equivalent. The Colony was, in fact, entirely given away.

Well, this document was signed and agreed to by both Governments. But there was a change in the Government at home, and moreover the Government of the Colony flatly refused to ratify the treaty. The Ford-Pennell arrangement of 1885 was therefore dead, but the Colony had an exceedingly narrow escape.

Now, in 1886 I happened to go out to Newfoundland, and on my arrival I spoke to some of the leading people, and said I was very glad to see they had got rid of this iniquitous arrangement. I further said, "You must not rest on your oars. It is a very important matter that the public at home should know all about it and how unfair it was to the Colony. Some of you should write to the *Times* or to a magazine and expose the whole thing. If you do not" (it was not done), "you may depend upon it that if any difficulty crops up in future about the treaty shore question, the British Government will turn round on you and say, 'this is all your fault, because you did not agree to that excellent arrangement of 1885.'" It is a rather risky thing to prophesy in these days, whatever it might have been 3,000 years ago; but on this occasion my prophecy became absolutely true.

In two or three years the lobster question came up, and Lord Knutsford, in response to some memorial from the Government of the Colony dealing with mines on the treaty shore, among other matters, threw it in their teeth that they had not agreed to this arrangement. Lord Salisbury, about the same time speaking in the House of Lords, was reported to have said, in alluding to the arrangement:—"It became my province to sign an arrangement initiated

by my noble friend opposite, Lord Granville, in my opinion a most equitable and workable arrangement, which the people of Newfoundland, apparently at a heated time of election, threw out and thereby lost a golden opportunity." A golden opportunity indeed! Where is the golden opportunity? Nowhere, but for the French, who were very anxious to avail themselves of it, but were fortunately not permitted to do so.

I will just say a word as to the infringement by France of the treaty stipulations. The French began in 1815 to fish up the salmon rivers, poached on the Labrador coast, wintered in certain places, erected buildings of a more substantial character than allowed by the treaties, exported lumber to St. Pierre and Miquelon, barred the rivers with fishing weirs, built vessels instead of merely repairing them, took the law into their own hands, and left their boats and other gear on the coasts, which they had no right to do by treaty.

These infringements of the treaty are chiefly to be found in a report by Mr. Perley, who was a Nova-Scotian, employed by the Foreign Office. He was sent out to Newfoundland in 1857 to enquire into the alleged grievances of the French, who complained that our settlers had interrupted them in their fishery rights. Mr. Perley used to tell the following story. He was over here before sailing for Newfoundland, and went to the Foreign Office one day, when one of the Permanent Secretaries said to him:—"When you are about it, Mr. Perley, you might as well make a report on the fishing difficulty which has turned up at Vancouver." Mr. Perley said:—"Certainly I can do that after I have finished with Newfoundland, but it will take me some time to get there" (he would have to have gone round by Cape Horn in those days). "Why," said the gentleman at the Foreign Office, "the two places are close together, are they not?" I hope the geographical knowledge of the Foreign Office has improved since that date. With regard to the Islands of St. Pierre and Miquelon, the French have a right to fortify them, because the proviso made in the treaty of 1673 which prevented them doing so was not repeated in the next treaty; but they can only fortify them to the extent that they must not become an object of jealousy. That is rather indefinite, but that is the opinion of the law officers of the Crown.

With respect to Mr. Perley's report, the law officers remarked:—"We do not discover in these papers that any just cause of complaint against the British fishermen or settlers exists. The only grievances seem to be those sustained by them."

As regards St. Pierre not being an object of jealousy, it is certainly so, as it is a nest of smugglers. We are not even allowed to have an agent there; while at St. John's there is a French agent, a M. des Isles.

Our Government up to that time did not appear to have taken much notice of these illegal actions by the French. On this head the law officers of the Crown made some very pertinent remarks, referring to the Grey Islands and Belle Isle North, where the French had attempted to exercise exclusive rights. The law officers say these islands, being in the Atlantic, and not in the Gulf of St. Lawrence, where islands on the coast

are alone mentioned in the treaties, the French have no right there; and they go on to say this. "This appears to us to be only one of the numerous instances in which the French by encroachment, and profiting by the supineness or tacit acquiescence of Great Britain, are steadily proceeding:

1. To convert easements or rights of uses in property.
2. To extend concurrent rights into exclusive rights, and
3. To interrupt and destroy British exclusive rights in a wanton manner."

They further say:—"We venture to point out that the encroachments and violations of stipulations appear to be entirely French; we would therefore suggest the importance, first, of vigorously asserting all British existing rights, and being prepared to maintain them for the future, in case of need, against their entire destruction or total interruption by France. We do not observe that this has ever been done on the coast of Newfoundland." The same thing might have been said yesterday, or at all events up to the time of the present Government coming into power, up to which date, at any rate, the excellent advice has been more or less ignored.

Now as to the general grievances of the people of the islands residing on or frequenting the treaty shore. They have been driven out of harbour by French men-of-war when not fishing at all, or when fishing where no Frenchmen were near, in which case there could be no interruption. They have had their nets and fishing gear destroyed by French naval officers even when not molesting French fishermen. In any case, the French have no right to take the law into their own hands. A very gross case is referred to in the Foreign Office memorandum of 1873, when the commander of the French war-ship "Diamant" destroyed the nets of English fishermen without warning, in a bay where no Frenchmen had frequented for thirty years, and where none were present. This was considered a direct assertion of the French claim of exclusive right to fish. Our Government protested, and the only answer Lord Granville received was that these acts of the French naval officers were defended.

No Newfoundlander has ever, as far as I can ascertain, received any compensation for such illegal destruction of his property. To a poor fisherman the destruction of his nets is not a mere "pin-prick," but a stab in his vitals. Of late years it is not the French fishermen against whom there are complaints, but the French naval officers. Commander Knowles stated in his report about 1873 that the French and English fishermen got on well enough, but when a French man-of-war appeared it interfered with our people.

For many years the treaty shore was a sort of no man's land, and the residents were not represented in their House of Assembly.

The British Government refused to allow Newfoundlanders to have grants of land on that part of the coast, and also refused to allow the Government to appoint magistrates there. In 1873 the Colony made a very strong appeal to allow the appointment of magistrates on the treaty shore. There were then a good many people settled there—some 6,000.

Lord Granville, who was then in office, asked the French if they objected They did not answer for six months, and then they said they would not agree to it. For us, who own the entire sovereignty of the island, to ask a foreign Power for liberty to carry on jurisdiction in our own territory, and appoint magistrates there, was not only quite unnecessary, but a very ignominious proceeding. Lord Granville afterwards actually asked the French if they had any objection to our having lighthouses on the treaty shore. The French on this occasion were pleased to say they had no objection. Magistrates were not appointed until 1881.

Respecting Bait and Bounties.

Perhaps now I had better begin by telling you what bait is. The bait early in January is herrings; then come capelin, a very small fish about as big as a smelt, which comes in countless millions to the shore. Then later on come squids, which is a small cuttle-fish. Early in the eighties the French increased their bounties considerably. Formerly the French only gave bounties to vessels fitted out in France. Later on they gave bounties to vessels fitted out in St. Pierre; this had the effect of increasing their catch, so they invaded neutral markets. Formerly most of their fish was consumed in France. The bounty was sometimes 50 to 70 per cent. of the value of the fish. They also became rather aggressive, and the Newfoundlanders in retaliation determined that they would not allow the French to buy bait on the non-treaty shore, so they brought in and passed a Bait Act, but the British Government declined to agree to it. They brought it in again the following year, in 1887, but the British Government again refused assent, although the Governor, Sir W. Des Vœux, backed up the Colony in a very powerful despatch. Lord Knutsford gave as the reason that the French objected to it! Very likely, as it was brought in especially to hamper them. In the same year, 1887, all the Colonial Premiers came over here, and all the other Colonial Premiers supported the Newfoundlanders about this Bait Act. The Government gave way, and the Royal assent was at length given to the Act, which a few months before was refused. This Bait Act was brought into force the next year.

Now the herring are found in these two bays, viz., Fortune and Placentia, which are only about 40 miles from the banks, in January, three or four weeks earlier than on the treaty shore at St. George's, which is round Cape Ray, which is some 200 miles from the banks, where any one can fish. If in these first three or four weeks the French cannot get bait in Fortune and Placentia Bays, then they cannot get fresh herring at all. It is certainly true that the French have caught a species of shell-fish on the bank which serve as bait. It is not so good as the other bait, and the supply is not unlimited, and moreover it has to be caught in traps, which takes time and trouble. Formerly the French on the banks got all the bait they wanted from the Newfoundland fishermen. But when that supply was cut off they had to go round Cape Ray to the treaty shore to catch bait, nearly two hundred miles away, sometimes more; this

entailed much loss of time. A great object is to have the bait fresh, and if the Frenchman has to go so far he cannot get it fresh.

Although this Bait Act was very badly carried out, it did, according to French returns, knock down their catch to nearly half. I see in the *Times* it is stated the French catch on the banks last year fell off 28 per cent. since the Bait Act was in force. The French pretend that they can do without our bait, but that is all nonsense, and is contradicted by their official reports. The people living in Fortune and Placentia in this bay made a good deal of money out of it, but they imagine that all the rest of Newfoundland and Labrador must give way to them, and they evaded the Act in every way they could. If this Bait Act is very carefully carried out, which I do not think it can be without the assistance of England, it will be a very good thing. There is no doubt but that the prevention of the French getting bait from the non-treaty shore would damage their bank fishery enormously, and go far to ruin it altogether. The French bank fishery is a very valuable commercial fishery, and a very valuable nursery for their seamen. As I have already explained, it is open to the world. There are plenty of Americans and Canadians there. It is valuable for seamen for the French Navy, but not so valuable as it was when the movements of ships depended on sails and sailors instead of as now on steam and stokers. Commercially it s very valuable, and there are, according to a Newfoundland authority, 12,000 men employed on these banks and some 500 vessels. On the treaty shore the fishery is worth very little indeed. There are only now some 7 French fishing stations, employing some 250 men, where formerly there were more than 70, and the very fact that they have dwindled down from 70 to 7 shows that the fishery can no longer be a valuable one. A French admiral has stated most positively that the shore fisheries are no good to the Navy because the men employed there are broken-down old fellows.

About the year 1891, a French naval officer landed at St. George's Bay and prevented our fishermen from selling bait to the Americans—a most outrageous action, which the French Government eventually disowned and apologised for. Subsequently, regulations were made respecting the sale of bait at St. George's; certainly with the concurrence if not at the instigation of the home authorities, by which the French were given a pre-emption in buying before others. Moreover, the price was fixed. This may have been convenient, but it was not legal, there was nothing of "the open door" about it, for while the door was held open for the French, it was slammed in the face of the Yankee and the Canadian. There is another point touching bait. If what we gave to France at the Treaty of Utrecht was leave to prosecute a cod fishery only, which can be maintained, such, naturally, would carry permission to take the bait wherewith to catch the cod, but this would not permit bait to be exported for use outside treaty limits. The French are permitted to cut wood to build stages on the treaty shore, but not to export such timber to St. Pierre or Miquelon to build stages there for drying, neither should they be permitted to export bait to the banks to

catch the fish that are dried on the above-mentioned islands. The two things are on all fours.

If Newfoundland had joined the Dominion of Canada, as she should have done, she would have had a stronger hand; of this the British were quite aware, for Lord Granville, in a despatch referring to an agreement which in 1869 there was an attempt to make with France, said that the settlement of the question was pressing, "as the approaching union of Newfoundland to Canada might render the question less tractable by increasing the number and importance of those interested in it." For they dare not treat Canada as they have treated Newfoundland!

These, ladies and gentlemen, as far as I have been able to explain in the time at my disposal, are the main points in this fishery question of Newfoundland, and I have only one more word to say. The only thing now is, what is to be done? Well, use the weapon which is in our hands, and use it effectually—that is, the Bait Act. Carry the Bait Act out to its utmost limit, and you will more or less ruin the French bank fishery, which, as I have already said, is very valuable, whereas the shore fishing is worth very little indeed.

We may hope that this matter will before long be brought to a satisfactory conclusion—a conclusion that will satisfy not only France, but Newfoundland.

But in any solution of this question the very least we have the right to expect is, that the people of Newfoundland shall be able to carry out their daily avocations without illegal interference, and that they shall no longer, in a manner not obligatory by treaty, be harried and coerced, either by, or in the interests of, a foreign Power.

Captain the Hon. M. BOURKE, C.M.G., Royal Navy: — After all that we have heard quoted from the treaties by the lecturer, I would say that I have just returned from Newfoundland, having been there as commodore in charge of the fisheries for three years. For fear anybody might think from this lecture that everything out there has being going wrong, I would tell you that there is a great deal that does go on out there which is really not as represented by interested persons in the newspapers. I simply want, in a very few words, to tell you what actually does take place. I have had to study this question very closely, and I have been to every part of the treaty shore. I know every man on the treaty shore, and I know everything about the people who live there. As General Dashwood has shown, the French Government claim exclusive rights of fishing, and the British Government have always resisted this claim. The practical effect of this is, that the French on the spot do not get any exclusive rights of fishing. On the contrary, the residents on the shore enjoy and exercise in every way a concurrent right, and during my command I had no trouble between the local fishermen and the fishermen from France. I received complaints from the French from time to time when an abnormal number of schooners from other parts of the coast came to fish in and about where the French were carrying on their industry, but against the immediate residents no complaints were made, nor would they have been entertained so long as the residents did not interfere directly with the French, and they do not do so. On the contrary, perfect harmony reigns between them, and I could give numerous instances of French aid to the oftentimes semi-starved inhabitants, more especially in the spring of the year, when the French first come to the coast from France. That, gentlemen, is the actual working of the question so far as it affects the exclusive and concurrent right of fishing

between the two nations. I do not say what the French claim is, I am only telling you what actually takes place. With regard to "fixed settlements and the (practically) exclusive right of the shore for half-a-mile from the sea," I have never heard of any practically exclusive right of that sort, and the lecturer did not explain such a claim on the part of the French. Of course, as the population on the French shore is over 12,000 souls, there must be settlements in which these persons live. As to these I have never received any protests, nor do I know of any having been made. With reference to wharves on the French shore, I may say, taking large with small, there are at present a great number, some constructed during former years and others recently, and they continue to be built. During my command two piers were objected to by the French. In one case the pier was completed and all the plant for the last section of the railway across the island landed there, and it was then broken down by ice, it having never been protected against such a contingency, and since then it has not been repaired. At present there is no use for such a pier. Another pier during my command was commenced at Bluff Head, not, as the General has said, 20 miles, but 4 miles from a French fishing station of sixty-seven men, at a place called Long Point. As the question of piers was then forming the subject for an arrangement between the two Governments, the builder of the pier was told he must delay the completion for the present. The manager told me subsequently that he wished his undertaking had been stopped earlier, as it would have saved him 1,000 dollars, as during the first gale his pier was rolled up on the beach, for the exposed coast did not permit of any such pier being able to withstand the exigencies of weather and ice. Anyone might have told him that before if he had asked. The mine, which is a chrome mine, was not objected to by the French, nor do I know of their objecting to mines generally, but only to wharves which may affect their fishery. The word "may" is the evil of the whole thing. It is not that it "does," but that it "may" at some future date. I do not allow this claim at all. It is continually asserted that the presence of the French on the coast prevents British capital from flowing into the country for the development of the mining interests on the treaty shore; this may be so, though I have often asked for any specific case, and not been able to discover one. I would suggest the holding back of British capital is more due to the paucity of good mines. As far as I can gather, there is not one single known mining interest on the treaty shore worth working which is not being worked, and I do not think that any additional building of piers will cause mines to grow in their immediate vicinity. On a coast such as Newfoundland there are only a limited number of places where piers can be built alongside which deep-draught ships can lie. Then it will readily be understood t is no use building a pier unless it is to be of use for some known mine, and unless such pier will withstand the gales and ice which are likely to beset it. I would suggest that neither of these contingencies has anything to do with the French. As to the right to exercise jurisdiction on the treaty shore, in 1887 and 1889 there were cases of French naval officers having interfered with the fishing gear of British subjects, and this was made the subject of a strong protest on the part of the British Government, since which time I know of no case of attempted action on the part of the French naval officers. The orders they act under are not to interfere directly with any British subject, but to make their complaint to the British naval authority. This is what is done. With regard to the lobster industry, there are fifty-six British lobster factories and fifteen French. The lobster fishery is entirely confined to the western treaty shore. There are practically no lobsters on the N.E. coast. There is no difficulty in the working of the lobster fishery between British and French subjects. To can lobsters is a very paying concern, and one which everyone is anxious to embark in, but by the reckless way in which the fishery is being worked by everyone the lobster has diminished in size; and though the number of lobster traps has largely increased, the total catch has fallen off. I look upon the Newfoundland lobster industry on

the treaty shore as a doomed one, the same as it has proved in America and Canada, where steps were not taken to replenish the stock. Under existing circumstances and at the present rate of decline it must shortly break down altogether, and already there are signs amongst some of the French factories of an inclination to give it up, though in other cases it is still remunerative. Thus we come to this, that whether the *modus vivendi* is set aside or not, the disappearance of the lobster will most surely in the end settle the question for itself. Whilst every British subject must feel sore at the fact that any foreign Power should have any rights on a British shore—and no one would be more glad to see them ended than myself—I must say both from the British and French point of view the question is mainly one of sentiment. Sentimental from the French point, inasmuch as the shore fishery does not pay them. It never has paid them, and that is why the French have been coming to the shore fishery in ever decreasing numbers. Twelve years ago there were about 2,000 fishermen from France on the coast, and in 1898 there were under 400. It is only the sentiment of the thing which keeps them there. It is also sentimental from the British point of view, and for these reasons :—First, the fishery. The total French shore fishery amounts to 18,000 to 20,000 quintals in one season, which only slightly exceed the export from St. John's alone for one week. The British Newfoundland catch is about 1,200,000 quintals annually, so the French shore fishery of 18,000 to 20,000 seems a flea-bite in comparison. If the fishermen were not on the shore, they would be fishing on the banks, where they would take more fish. Second, as to the expansion of the colony. With regard to the 400 Frenchmen with fishing rights on over 800 miles of coast, which are supposed to prevent the colony expanding, it is said that mines cannot be opened or piers built on account of French pretensions. As I have said before, it is no use building piers where there are no mines working or workable. There is no use building piers in places where they will not stand gales and ice, and the fact of building a pier will not cause a mining interest to grow where one did not exist before. It then comes to this, that if the question is approached from the working point of view of the end of the nineteenth century, I submit it assumes different aspects than when viewed from the light of the treaties and the statements of interested persons, both English and French. I will only add that attempts were made some few years ago amongst the inhabitants of the treaty shore to discover the feeling for or against the French on the coast, and it was strongly in favour of the French remaining. Lately also I have received letters from residents on the coast to say that on a vote being taken, it would be 5 to 1 in favour of the French remaining. Far be it from me to wish that this question of so long standing should not be settled ; but knowing the circumstances of how the evil to Newfoundland is apt to be exaggerated, and how the shore fishery of France is a more or less dying industry, I wish to point out that it is not worth a row of pins in the way of compensation to persuade the French fishermen to give up their fishing rights on the shore, except that on their departure the malcontents in Newfoundland will be deprived of a grievance which has always been a great trouble to them, and has been accepted in this country without much enquiry as to the actual rights and wrongs of the case. I am sorry I have detained you so long, but it is difficult to get the discussion of a subject, which has gone on for nearly 200 years, into the few minutes permitted. I have only barely touched on the fringe of the question. The departure of the French from the treaty shore will in no way ease the shoe in the only place where it really pinches, namely, in the competition of French cod-fish in the European markets. I do not think if they go we should benefit much. There are many side-issues to the Bait Act which we do not hear ; and as to the catching of bait, there is no doubt that the French do manage to catch other bait. It is a fact that they do use this winkle which they catch on the banks ; there are not large penalties to pay for the purchase of bait ; they have to pay a dollar and a half per ton of their vessel and take out a licence, and they can get thus as

much herring bait as they want. They do not take out a licence, because they do not want the herring bait. In former years they used to spend 800,000 francs in and about the coast of Newfoundland; last year they did not expend more than 6,000 for bait. They fish with the winkle they catch on the banks. The lecturer said he heard it was being fished out, but I do not think it is. When fishing for cod, the winkle bait is a great deal better than the herring bait caught on the shore.

Admiral Sir RICHARD VESEY HAMILTON, G.C.B.:—I have very few words, Sir, to say upon this subject. I hope any succeeding speakers will confine themselves to principles; even our lecturer has been giving really too many details, which it is utterly impossible in an assembly like this to remember. Captain Bourke has also gone far too much into detail. The point before us is this: Are the French carrying out the treaties under which they are allowed to fish in Newfoundland, or not? The question is: Is it part and parcel of the French treaty that they should be allowed to set up nets or traps to catch salmon up the rivers? I was the first permanent senior officer in Newfoundland, and in my days no Frenchman, unless perhaps a poacher, ever caught salmon in the river. No doubt they did it surreptitiously, because a British man-of-war could not be always on the spot. The salmon fishery was always recognised as appertaining to the territory of the country in which those salmon were. The French had no territorial rights whatever. I well remember my commander-in-chief, hearing a French flag had been hoisted on the Newfoundland shore, giving it to me hot and strong for not having had it hauled down; but he had been misinformed. I must say that at the time I was up there, there were very few troubles and disputes indeed between the French and English fishermen; but they appear to have increased of late years very materially My humble opinion is that in the earlier days the French and English naval officers managed to keep peace in the country. Lately the diplomatists have taken matters in hand, and they have made a fine mess of it.

Lieut.-Colonel Sir J. TERENCE N. O'BRIEN, K.C.M.G. (late Governor and Commander-in-Chief of Newfoundland):—I quite concur with Captain Bourke as to the result of his experiences on the treaty shore. I had the honour of being for six years Governor of Newfoundland, and although I have not been there for the last three years, I have been along that shore and given careful attention to the matter. On my round of 800 miles I heard of but two small complaints of the French as having been there made. When I came to ask people of different classes about the French, I must say I found the opinion to be quite what Captain Bourke represents. They all said the French were very useful, as they spent a little money and gave gratuitous medical assistance to the poor sick, while the admiral used to allow his band to play, which literally astonished the natives; altogether there did not then exist a state of things such as Major-General Dashwood makes out. I am afraid he really exaggerates the matter, and has got his proofs rather from St. John, where the French treaty shore question is made a great political lever. The main reason for my saying this is because in the year after the fire, and again in the year after the financial crisis, we never heard a word about the French treaty shore; but when they want to send a deputation to the home authorities, or to bring pressure to bear in England, then it is an enormous grievance. I am the last man to say that we should not insist on a settlement of this long-standing grievance, because at any moment somebody might follow the advice given by General Dashwood, who wrote in the newspapers while I was in St. John, that if interfered with the fishermen should fire on the French, which might bring on war to-morrow. But I do not think it is *the* pressing grievance against the French that he has made out. I can only say, speaking from my own experiences of the French officers, that I have had most cordial relations with them, except on one occasion; and many of them have expressed to me how distasteful it was to them to have to perform duties bringing them in conflict with our Navy, the authorities, and the people. As to the mines, we had none operating on that shore in my days, such as would necessitate the stoppage of the erection of piers as detrimental

to the French rights. I hope the colony will get on, and the grievances be got rid of. The crux of the whole matter, however, lies in the French bounties, for the French taxpayer not only pays to encourage his fishing by cheapening the food for the French consumer, but he also pays for the consumption of the Spaniard, the Italian, Greek, etc., and thus drives Newfoundland out of the markets of Southern Europe. It is very unfair on our colony and its fishermen, for the bounty almost equals the cost of production. This, of course, the merchants feel, and this is where the shoe most pinches. I do not allude to the Bait Act, as the cost to effectively enforce it would be excessive, and the result even then doubtful.

Captain ARTHUR M. FARQUHAR, R.N. :—Two years ago I returned from three years' service on the Newfoundland coast, and I only wish to say that I agree with the remarks of the last two or three speakers, that far from there being any particular strain between our men and the French fishermen on the treaty shore, they worked very harmoniously together; indeed, our own people are under many obligations to the French fishermen. The lecturer thinks the panacea for the whole evil is to stop the supply of bait to the French. That has been tried, and did not succeed for two reasons: First, because the French got other very good bait, winkles, from the banks, and brought other bait in ice from France for the early portion of the fishing. It failed, secondly, because it robbed the very poor Newfoundlanders of their only harvest—the bait which they catch on the south coast and sell. Of course it is necessary to prevent smuggling. The men smuggle because they do not wish to starve. They have either to break the law or starve, and they prefer to break the law. There are not enough vessels to stop smuggling. It would require a considerable number of vessels and quite a dozen steam launches before smuggling can be prevented. The Government must find some means for protecting their starving people, who at times are in very great extremities.

Major-General DASHWOOD, in reply, said :—I do not think I need detain you beyond a minute or two. With regard to what was said by my friend Sir Terence O'Brien to the people on the treaty shore rather liking the French there, I daresay if you go to a harbour where there are about eight or nine families, one family is paid by the French to take care of their boats and other gear, and probably that family would be in favour of the French remaining there; but how about the other seven or eight? With regard to the infringements of the treaties and other acts of the French, which I have alluded to, all these infringements and acts are all taken from official sources; most of them will be found set out in a Foreign Office memorandum printed in 1886 and 1873. There is no getting over that. I have already said that I do not think the French in these days, as far as I can make out, take the law into their own hands, or are nearly so aggressive as they were formerly. That I have already stated. Captain Farquhar tells us, with regard to the question of bait, that he thinks the French are able to do without bait, that besides winkles on the banks they get herrings from France. When the Bait Act came into force in 1887, if you look at the French returns you will find the catch of the French went down about half, and last year the French catch, owing to the Bait Act, went down 28 per cent., although the Act was always very badly carried out. I acknowledge that. But I say if the Bait Act was really carried out well there is no question but that it would hamper the French enormously. The opposite opinion is what the French say when they pretend it does them no harm. Winkles may be of some use, but I am told by people who understand the fishery that winkles are not so good as other bait and by no means unlimited in quantity, and, moreover, there is considerable trouble in catching them. Captain Farquhar has stated that a number of people in Newfoundland do not care to get rid of the French. I have not gone into that subject, because it is more or less a political question. The people of Newfoundland do not pull together on any subject, as far as I know. It is a case of every man having his own axe to grind. There are many merchants having no dealings on the treaty shore who would not care two-

pence if it were a French colony, provided they got the bounty reduced and were able to get a better price for their fish. It is ridiculous to suppose that the whole of the community of Newfoundland and Labrador are to suffer for merely two bays. For we cannot expect the whole of the people of Newfoundland and Labrador to give way to the people of two bays—Fortune and Placentia. If it is absolutely necessary to compensate them for being unable to sell bait to the French, let them be compensated.

The CHAIRMAN (Sir William Kennedy):—Gentlemen, I think I am only expressing the opinion of all here in thanking General Dashwood for his able and interesting lecture, whether we agree with him or not. The fact is, and it must not be forgotten, that these treaties, although obsolete and very vexatious, are still treaties which have to be abided by, and the French are perfectly right to stick to their rights. As long as they confine themselves to those rights there will be no trouble at all. Of course it is a very difficult position. It is impossible for two people to be fishing in the same water without there being trouble. You have only to put two people in a salmon pool, one on each side, and if they were not abusing each other in five minutes I should be very much astonished. One has to give way to the other. The position is such that it is only by the tact, courtesy, and good temper of the naval officers on both sides that harmonious relations have been maintained all these years. I can speak from experience that that is a fact. I had a most charming colleague in Commodore Devarenne, and we never had the slightest trouble at all. We were always giving and taking. We understood that the position was an impossible one, and that unless we gave a little on each side there would be trouble. It is not right that a naval officer should be put in such a position as that. Diplomatists cannot manage it, and it is left to naval officers to do the best they can. They have done it well up to the present time, but happily the time has arrived when the French Government are inclined to meet us half way, and I am sure that all who have the interests of peace at heart, and who have the welfare of our oldest colony at heart, will hope that arrangements will be made satisfactory and honourable to all concerned, both France and England.

THE INFANTRY DRILL-BOOK, AS ILLUSTRATED BY THE BATTLES AROUND PLEVNA.

By W. V. HERBERT, Esq. (late Captain in the Turkish Army).

Friday, March 3rd, 1899.

Lieut.-General G. H. MONCRIEFF in the Chair.

THE subject of this lecture was suggested to me by Colonel Henderson, of the Staff College, Camberley, who writes regretting his inability to be present, owing to an unavoidable journey to Ireland. I make special mention of the fact that the subject is Colonel Henderson's choice, not mine, since it would have been presumption on my part to volunteer comment or criticism on what is undoubtedly the Secular Bible of the British Army, namely, the Infantry Drill-Book; but being called upon to do so by such high authority, I cannot but comply, requesting you to remember that my opinions and views are not given as conclusive or unimpeachable, but are merely modest suggestions, open to all kinds of qualifications, doubts, and contradictions.

I have been sorely tempted, and have fallen to the temptation, to preface my paper by an old fable, as being a most appropriate simile. A sailor was shipwrecked and cast ashore on a desolate island. He lived as best as he could, but the want he felt most was his inability to worship somebody or something—a desire inborn in all human beings. There was nothing or nobody on that isle that he could reasonably worship. One day he discovered a tall column, on the top of which was some bronze image; the column was too high to discern what that image was meant for; but he thought it was something noble and beautiful, goddess or woman, and straightway he fell down and worshipped it. Presently a great storm arose and brought the column to the ground. Full of joy he ran to the spot where the image had fallen, for now at last he would see his goddess face to face. But behold! he had worshipped a brazen monkey.

We have all been young and worshipped monkeys. My particular pet monkey was the war-god. Now I maintain that popular representation of war leads to the setting of an ugly reality upon a pedestal so high that its hideousness is unseen, and only the sheen and the glamour of the brass remain visible. A few days ago I saw an expensively illustrated and highly coloured book of the British Army, issued by a famous firm, in which soldiers wore, unconcerned, nice

vermilion wounds, highly ornamental, and in which the bivouac fires were lighted by men in white kid gloves.

The Infantry Drill-Book is built somewhat on similar lines. For instance, it says, in essence: When an attack is to be made the infantry is formed in three lines, the first does this, the second that, the third so, and IF *the enemy's position* is carried a vigorous pursuit is to be made. But oh that "if"! All the infernal stress and confusion and tumult and devilry which precede that fatal "if," and upon which the fate of nations hangs, is passed over in silence. Perhaps that was unavoidable, considering the way the British Drill-Book is compiled. It is really a double work in one volume, the first containing the Infantry Drill, and the second the Infantry Field Service, the latter interspersed with a great deal of what is really Grand Tactics of all three arms.

In the German Army those two are kept apart: there is the drill-book, by which the recruit is trained, and there is the field service book, by which officers are theoretically educated.

With drill pure and simple I can have no concern here—my business is Sections V. to VIII.; but since the subject is too vast for a one hour's paper, I had to leave Section VII. Outposts, reluctantly out of consideration. My three parts are, therefore: Combined Tactics, Route Marching, Operations by Night. I propose to go through these section by section, reviewing them in the light of actual occurrences during the Plevna campaign, with just a few other examples from military history. And I hope to prove that one can no more learn the art of war from the Drill-Book, from any drill-book, than one can learn how to cook by reading a cookery-book, or how to play the fiddle by reading a violin school.

The real value of a drill-book, even of the twofold British specimen, is apparent: it teaches, firstly, how to drill a recruit; secondly, the mechanical part of the field service. That is its legitimate use. Its abuse is to apply the drill-book regulations to all cases without discrimination. In war everything is surprising and novel, and no two cases have ever been exactly alike. The Prussians are, or used to be, great offenders in this respect. An amusing case suggests itself to me: Trautenau, 1866. General Bonin, commanding the 1st Prussian Corps, was to invade Bohemia across the Giant Mountains. The drill-book said that in broken country infantry is to do the reconnoitring. His advanced guard was, therefore, composed of infantry. A pig-sty was seen on a distant mountain slope, and a company was sent out to investigate that pig-sty, for the drill-book said so. The company returned and reported that the pig-sty was occupied by pigs. Presently the whole of the advanced guard was sent to the right and to the left of the pass, to explore those wild and rugged mountains, where never an enemy could have been, even if he had wanted to be. But the drill-book said so. hen the main body of the corps arrived in Parschnitz no advanced guard was to be seen anywhere. Two hours later the advanced guard arrived and reported that the road was quite clear!

I come now to my subject proper: Part V., Combined Tactics, Section 107, General Observations. I find here a somewhat important case

omitted. No mention is made of two stationary armies coming into conflict. Yet this is what actually happened at Plevna, not once, but a score of times, during the six weeks of the final investment, October 24th to December 9th. The difficulty is, not how to conduct actions in these circumstances, but how to avoid them. I maintain that this is a most delicate task (granted that both sides have zeal and energy) and well worthy of official consideration. Such a case as that at Plevna during those six weeks, where it was of the utmost importance to both sides to avoid engagements, might well be repeated in future European warfare. Both sides at Plevna had the gravest reasons for desiring to avoid blows, though they were different: the Turks wished to save all their strength for a last and desperate effort; the Russians, as personified by Todleben, their actual leader since their third and last defeat, were determined not to sacrifice another soldier—having failed in three big battles with a loss of over 30,000 men—and trust to starvation and exposure alone. Yet I find that during those six weeks no less than eight actions of the second magnitude were fought (leaving many smaller affairs out of consideration), engendering a loss in dead and disabled of 3,300 men, taking both sides together. That none of these local engagements became general (for here hatred of race and religion added fuel to the fire of brave and stubborn soldiers) speaks well for the self-suppression of the leaders of both sides. I know it was a difficult task. Since, I repeat, such circumstances might easily occur again, I should, if I had the making of a drill-book, lay down some regulations as to how to act for the purpose of: firstly, avoiding engagements; secondly, preventing local engagements from becoming general.

In the same section I find a remark about superiority in training, discipline, and so forth. Now, unless we fight savages, this is a matter of national feeling, or, rather, national conceit. No soldier would willingly acknowledge his opponent to be better trained or disciplined than himself, and—if it were so—to tell your men that it is so would be adding a new terror to the many existing terrors of warfare. The Turkish soldier looked upon the Russian as upon the darkest barbarian, distinguished from a pig or a dog only by the quantities of brandy he consumed; and the Russian peasant-soldier looked upon the Turk as upon a monster from a different planet, to whom such an idea as training could never apply. As to numbers, these are mostly unknown to opponents—for it is part of the business of the leaders to keep their strength concealed.

You all have experienced from actual service or manœuvres, how difficult it is (granted that your opponent knows how to make use of the ground) to say whether a battalion or a brigade, whether a division or an army, is in front of you. Guesses, and calculations based upon hearsay evidence, are notoriously misleading and often ludicrously wrong. The first Plevna battle furnishes an amusing double example. Schilder-Schuldner was sent with his division to occupy Plevna, which—so he was instructed—was held by a few battalions of the enemy. He found there an army. When he was beaten he estimated that army at 40,000 to 50,000. It actually numbered 13,000!

Section 108.—Information.

I have already mentioned the danger of small local engagements, such as may be caused by advanced guards or reconnoitring parties, leading to general ones. To stop an engagement may have a very bad moral effect. The soldier is not a fighting machine, but a sentient being, subject to all sorts of moral influences. On the second day of the third and greatest Plevna battle, 12th September, the desperate and murderous Turkish onslaught on the redoubts lost the previous day to Skobeleff, was checked midway by the local commander, Tahir, Osman's Chief of Staff, for reasons which have never been made known, although an official enquiry was subsequently held by Osman. The effect of this on the troops was terrible, and it is a miracle that it did not lead to disaster and collapse. I speak with some authority, for I was there. The moral of this is: Rather than stop an engagement (particularly a promising one, as was the affair just mentioned), have no engagement at all.

Section 109.—Advanced Guard.

Surprise engagements are mentioned under this heading. I maintain that a surprise attack by infantry, not ushered in by artillery, is more effective than surprise artillery fire—quite apart from the fact that premature artillery fire has the well-known effect of an untimely disclosure of position. To keep the guns silent and surprise an advancing enemy with sudden and vehement infantry fire from a carefully chosen concealed position was a favourite tactical move of the Turks. We practised it in the first battle with great effect,. The result is almost always an immediate stoppage of the enemy's advance, and then volley upon volley into stationary and wavering troops with murderous results.

In connection with advanced guard actions, I might mention that Moltke's dictum that strategical plans of compaign can only go as far as the first battle, has a striking analogy in tactics. Plans of battle can only go as far as the first actual contact. After that, all is, not only unknown, but unknowable and incalculable. Osman's elaborate plans for the last sortie, as reproduced in the lengthy orders in my volume on the subject, very wisely stop at the first chance of actual contact. Had he gone farther he would most certainly have gone wrong, for he did not know and could never have foreseen Todleben's dispositions, made long in advance, providing for every emergency, and working with the smoothness of well-greased machinery, thanks to numerous rehearsals. He could never have foreseen that terrific counter-attack, made, not by the troops which we had charged and thrown, but by fresh troops from all points of the circle of investment.

Section 118—Action of Artillery.

At the risk of appearing a hopeless heretic, I venture to say that the orthodox preparation by artillery, which tacticians of all nations stand by, and swear by, is overrated. Allow me to express it in the shape of a simile. If you wish to push a man away from the spot he occupies, and place yourself on that spot, you are recommended to give him a few preliminary knocks that will set his knees a-tottering. The object of an

attack is to place yourself on the spot which your enemy occupies, and the preliminary knocks are represented by the artillery fire, which will weaken his foot-hold. But may not the preliminary knocks have the undesirable effect of arousing your foe to the danger of his position and thus increase the stubbornness of his resistance—not to mention the fact that they will do away altogether with the element of surprise, which is so potent a factor in warfare? This is precisely what happened at Plevna, just previous to the third battle. No more dismal instance of the failure of preparatory artillery fire can be imagined.

It lasted 4½ days, during which 30,000 shells were thrown by 450 guns into the Turkish camp. The material damage to the field fortifications done in day-time was repaired at night; indeed, fresh works were actually constructed. The loss in life and limb was: 80 by explosions of magazines, 120 direct by shells—total 200, or 1 man to 150 shells! The moral effect was worse than *nil*, for the Turks began to laugh at the Russians and their 450 guns!

Also when the artillery fire was on a small scale, mere local preparation for a local attack, lasting from 20 minutes to 4 hours, the Russians failed, as, for instance, with the fire of 6 batteries which preceded the great attack on the northern redoubt at the commencement of the second battle, 30th July.

Section 114—The Infantry Advances.

"The stress of battle will have brought about a mixture of units," says the Drill-Book; but from the book itself a soldier who has not seen active service can form no conception of the enormous extent and importance of this. I had on one occasion a company which was composed to the amount of one-half of strangers. The Drill-Book gives no information as to how an officer is to act who finds himself among strange and possibly officerless troops. The Turks had no drill-book—at least I never heard of one; drill was with them a matter of tradition, and their drill—as drill—was quite as effective as that laid down by a complex tabulated system of chapters, sections, and paragraphs. This tradition was, that any officer had the power to incorporate stragglers with his unit, or to form temporary units of officerless troops; and to him homage and obedience were rendered as if he had been their legal and official head from the very commencement, instead of being an acquaintance of ten minutes' standing. The confusion after a modern victory is astounding to the non-service man, that after a defeat is simply indescribable. It took Osman three days to restore order and cohesion after his brilliant third victory. It took Benedek ten days and a march to a fortress 80 miles away to restore a semblance of order after Königgrätz. That Krüdener, after his crushing defeat in the second Plevna battle, was capable of striking again twenty-four hours after the event, is wholly admirable; but it is an exception, and this one performance redeems this general, and saves him from living in military history as a total failure. The two attacks made by the Turks upon Skobeleff's redoubts on the second day of the third Plevna battle (one of which attacks I have already mentioned) were undertaken

by a storming column, made up on the spot at the briefest notice and composed entirely of odd battalions and companies, and part companies, and temporary units of stragglers, the whole under temporary leaders, many of them strangers to the men; yet the two charges were carried out in the most orderly and workmanlike fashion; one, most promising, was unpardonably checked by the Turks themselves; the second was a brilliant success.

This section (114) speaks of "Self-reliance in Subordinates." My impression, however, is that modern parade-ground drill not only does not teach this desirable quality, but suppresses it.

"Unless these habits [of self-reliance and the like] are inculcated during peace," and so forth, says the Drill-Book. Well, I can but state my conviction that war always causes surprising developments in men, deceptions and disappointments, both pleasant and unpleasant, and that peace behaviour is no criterion. But then, the Turks are notoriously unique among nations, inasmuch as they have invariably, throughout five centuries of history, belied peace prophecies and armchair criticism, in a manner flattering to themselves and uncomplimentary to the prophets and the critics. So, possibly, I am not an impartial judge on this point.

Section 115.—The Assault.

Here again, I may appear as a rank heretic, for I question the absolute wisdom of the orthodox three lines of attack. No doubt, in nine cases out of ten, where economy in strength is essential, and blows may be struck to the right and to the left, which even a prodigy of military farsight cannot foretell, the three lines are an excellent arrangement. But cases may arise where there will be and can be only one blow, a blow for life or death, for existence or extinction, when the result cannot be a state of suspense or coma, but only either a victory that will not be effaced from the annals of history, or the blackness of annihilation.

In such a supreme case there is, in my humble opinion, only one mode of attack: one line, and one line only. Have a small reserve at the disposal of the chief, so that he can make his word felt; and if you are surrounded have one-third to one-half of your force to keep the rear and the flanks clear. But for the rest, and with these qualifications, one line of infantry, somewhat deep, but rank close upon rank, with a rather broad front (so as to avoid making a hole in the hostile line, which is too narrow for practical purposes) and perhaps a little cavalry on the flanks. Then strike one blow, with all your weight and all your might, with all the fury and the devilry that is in you, and numbers notwithstanding, your enemy must be made of cast-iron to hold out. It is only if he has a force in reserve sufficiently large to replace the whole of the defeated force, with a margin to counteract the increase of moral strength of the other side which would accrue from initial victory, that he can hope to win in the end.

Now, this is exactly what happened at Plevna. I refer, of course, to the fourth and last battle, 10th December. The game was up for the

Turks, and the alternative stared us in the face: to be, or not to be. There was no middle course, no half-existence, no continuance of the present state of things. And only one stupendous blow could decide that terrible alternative. That blow was struck, and lives in history under the name of the Last Sortie. It is, I believe, the greatest bayonet charge ever undertaken. The Turkish Army, or what remained of it, was divided into two equal parts, each being a division of three brigades, with cavalry and artillery. Each brigade consisted of eight battalions, so that there were twenty-four battalions to the division. There was no reserve, unless you would count as such one single supernumerary brigade, mostly convalescents, which acted as escort to the train and remained at the disposal of the chief. One division kept the rear and the flanks free from the encircling enemy (and had, by the way, most desperate fighting to do against the terrible pressure of that ring of iron); the other made one ferocious rush to break through the hostile lines. The charging column, consisting, as I have said, of twenty-four battalions, was arranged in one line, two battalions deep, there being only a hundred yards or so between them; the front was, therefore, twelve battalions broad and covered exactly two miles. The charge was simultaneous, the alignment was almost perfect. The fire-swept zone to be traversed (upon which the Russians concentrated the fire of 180 guns and 36,000 rifles) was nearly two miles across; it consisted of a gently rising plain. In spite of awful losses, the charge broke completely through the inner circle of the hostile field fortifications. That the Russians after all won this battle is due solely to the fact that they fulfilled the one condition of success I have laid down before, namely, they had enough troops to spare and handy to replace the whole of the defeated force, with a large margin to boot. In fact, taking the two armies in their totalities, the Russians outnumbered the Turks by 6 to 1 in men and 10 to 1 in guns.

In almost every detail, as well as in the broad outline, this battle is a complete contradiction of the Drill-Book—but it is one of those exceptional cases which call for exceptional measures, and I think Osman's disposition met this case fully. None other would stand the light of intelligent criticism. At the risk of appearing partial, I wish to state my opinion that they were admirable. I was on the extreme right flank of that charging line, and anything grander I never saw or imagined, or wish to see or to imagine. It was one of those rare moments which reconcile one to the sordid terrors of civilised warfare.

In this section (115) there is a remark as to keeping troops well in hand. Here we have the question of the moral force of leaders—but I cannot now go into it without repeating what I said in my paper on the "Psychology of the Battle-Field," read in this hall two years ago and reproduced in the JOURNAL of this Institution.

There is also in this section considered the question of stopping attacks. My experience is that the stoppage of an attack for reasons not intelligible to the troops is dangerous and may be fatal. I refer once more to the Tahir incident already mentioned.

Section 117.—The Defence.

Here we have the important question of field entrenchments, with the closely related question of the dangers of over-fortification. The gravest danger of creating an improvised fortress by means of field fortifications is the creation of an artificial phase in warfare, of a centre which, for the time being, is the pivot of operations, but which—when the question at issue has been decided, one way or the other—is not the pivot of the campaign, and does not decide the latter. Plevna is a case in point. The danger of over-fortification is to construct more works than you can conveniently man and hold. Osman guarded against this, but the Bulgarians at Slivnitza in 1885 did not. Had the Servians pushed home on the first day of this battle, the Bulgarians would have had no earthly chance, and Sofia, the capital, would have fallen the next day. But the Servians were faint-hearted on the first day, and on the second and third day the Bulgarians received sufficient reinforcements to man all their trenches and redoubts. When the Servians woke up to the fact that they had lost an opportunity it was already too late. I cannot pursue this question without going into the science of field-fortification, which is foreign to the present subject.

One observation suggests itself to me, based partly upon personal experience, though on a very small scale. However good a position an army on the defence may have, the commander will always notice some object (farm, hill, wood, or the like) which he thinks it would be desirable to include in his lines; but there must be an end, and it requires farsight, self-suppression, and moral force to fix voluntary limits. A similar remark refers to advanced posts. We in Plevna saw daily before us many objects which would have made admirable outposts, but which we had to leave severely alone, simply because the number of soldiers and the maximum amount of performance which can be got out of them fix a definite limit, to exceed which is folly and may spell ruin.

Section 118.—General Course of the Defence.

Scarcity of ammunition is referred to. This is a very grave point. Nothing has a more demoralising effect than the spreading knowledge that the ammunition is giving out. Many commonplace analogies in every-day life suggest themselves. He who has ever written for the Press will understand me when I say that the knowledge that your paper or your ink is giving out at a time or under circumstances when the stock cannot be replenished, is at once almost paralysing. Many such instances could be given.

Tier-fire by infantry is mentioned in this section (118). This is most impressive and most effective, and should be practised whenever the ground admits of it. The Russian writers admit the terrifying and deadly effect of the Turkish tier-fire. The stupendous struggle for the Omar redoubt in the third battle was decided by tier-fire. The tier-fire of three Turkish battalions completely wrecked seven Russian regiments (21 battalions), which lost 5,400 men, or 260 per battalion, whilst the Turkish losses on this spot were 200, all told.

Section 119.—Counter-Attack.

The importance of the counter-attack, or its absence, to the fate of nations can hardly be over-rated; and yet no part of tactical science is, both in theory and in practice, more glaringly and more dismally neglected. The counter-attack deserves something better in the Drill-Book—the standard work, the pattern, the model—than a short section of less than a page in length, whilst Military Ceremonial occupies 36 pages! Far be it from me to under-rate the value of military ceremonial—it is the outward and visible sign of the inward and spiritual grace called Discipline. Moreover, ceremonies can be laid down in tabulated rules of mathematical exactness; the counter-attack admits only of general hints for guidance. Still, I maintain that a difficult and important subject is not rendered easier by being passed over in what amounts practically to silence. In my poor opinion a counter-attack, to be successful and decisive, must fulfil two conditions: firstly, it must be undertaken immediately; secondly, it must be undertaken with every available man and with the utmost possible vigour and energy. I would not waste precious moments in restoring units or adjusting the lines; temporary arrangements will do for all practical purposes, and every man within hail, independent of original units and original formations, must take part in it. A psychological moment once lost can never be regained. In a modern battle the chances of decisive blows are rare and fleeting.

The Turks were not good at counter-attacks. They lost a magnificent opportunity on the morning of the second battle, when the Russian attack upon the northern redoubts had failed and the Regiment Pensa, being officerless, was as a herd of scared sheep.

Section 120.—Enemy's Assault.

As regards the fire by the defenders on attacking infantry, the Drill-Book does not consider the stupendous effect of fire after absolute silence, starting suddenly from all points at short range. This is a risky game, certainly, but it is well worth the risk if plenty of ammunition be handy. Twice within my experience was it tried, and both times with great results, in the first and in the second battle, and in both cases on the first contact with the enemy. In the first battle the Turks, being concealed, allowed the enemy to approach until only the width of a narrow ravine separated the two bodies. In the second battle the Turks, both infantry and artillery, maintained a deadly silence—admirably kept up—until the Russians (the Regiment Pensa already mentioned) were actually within the encircling lines of the flank trenches which protruded from the redoubt. Then, on a pre-arranged signal, an infernal hail-storm from six guns at point-blank range and the rifles of the entire battalion; the result: the wreck of the Regiment Pensa, which lost 1,100 men—including all the officers—out of 2,000.

In the light of the Drill-Book these things read like fairy tales, and the Drill-Book reads like stern reality; yet the former are actual and well-known occurrences, and the Drill-Book is but a system of formulated rules for guidance, the exact counterpart of which has probably never really happened.

Section 121—Retreat.

I fancy that the only rule which can be safely laid down for guidance is contained in the words which Dickens puts into the mouth of Biddy in his "Great Expectations": "A cool head, a steady hand, a quiet tongue." Beyond this, that most distressful event, a retreat, hardly admits of formulated rules. The Drill-Book mentions the devotion and sacrifice which are required of artillery on a retreat: the Austrians at Königgrätz furnished a very noble example.

Section 122—Two Armies Meeting on the March.

I am afraid that this occurrence partakes generally so much of the nature of a surprise that there will be no time for carrying out elaborate instructions. This is a somewhat rare event, but the present century provides a striking example on a large scale in the practically unknown battle of Widdin, 1801, between the rebellious Janissaries of Servia and Western Bulgaria, commanded by Pasvan Oglu, Pasha of Widdin, and the Imperial Ottoman troops, commanded by the Greek Michael Sutsos. It is with some pride that I refer to this gigantic and murderous battle, for I was the one to rescue it from oblivion and the undeserved contempt of historians, in an article which I wrote for the firm of Cassell. No book of history, general or special, mentions it. Yet 150,000 troops were engaged; yet the loss in slain was 50,000, a third (there being very few wounded and no prisoners); yet it was fought for the fate of a vast Empire. Both sides were highly trained and disciplined; the Janissaries at this period counted among the best troops of the world; and the Imperial Army (although including a certain proportion of raw levies) was mainly composed of the loyal Janissaries of Eastern Turkey, and the Imperial Guards of Stamboul. These two armies met practically on the march. The Imperials were proceeding up the Danube towards Widdin, the centre of the revolution; the rebellious Janissaries originally stationed at Artzar, in front of Widdin, left their camp to meet the coming foe. The battle commenced at eight in the morning, and at one in the afternoon hardly a gunshot had been fired yet by either side, simply because the artillery had neither the time nor the space to deploy. After a mid-day pause the battle broadened out, and assumed the usual shape; but for five hours previously a ferocious action was fought, practically on the width of a single road, with, maybe, two narrow adjoining strips of fields. I cannot now pursue this subject; but those who wish to study the course of an action fought along a road by two armies meeting on the march might safely be referred to this unique event.

Section 124.—Infantry in Attack and Defence, General Principles.

The Drill-Book mentions "Independent action for the purpose of escaping from higher control." This is a grave and unpardonable offence. In strategy it often spells treason. Suleiman Pasha in 1878 was arraigned for that very crime. One of the indictments charged him with undertaking enterprises (namely, those against the Shipka Pass) in defiance of the general plan and the general orders as laid down by the supreme

command. Gourko's notorious insubordination when Todleben was chief, towards the end of the Plevna campaign, is another case in point, although Gourko was never called to account.

On a smaller scale a single company led (however well led) in defiance of the general principles of the plan of action may bring about disastrous complications.

"All ranks should be taught to think," says the Drill-Book. But does not any book which contains "drill" rather belie these words?

Under the head "General Principles of Attack and Defence" the following proposition suggests itself to me. According to the letter of the Drill-Book the part which infantry plays in any action is either attack or defence. But there may be cases when neither side attacks, and therefore neither side really defends (in the meaning in which the word is used in the Drill-Book), and yet where both sides fight, perhaps for hours and maybe with vigour, for instance, whilst awaiting the issue on another part of the battle-field. This is what happened in the third Plevna battle. There were three pivots of action: the Grivitza redoubts in the north-east corner, the Omar redoubt in the south-east corner, the Green Hill in the south. Yet the whole north front, three miles long, was engaged, on and off, for two days, but there was no attack and no defence, properly speaking. This might technically be called a retaining action. For this not improbable emergency the Drill-Book lays down no rules.

Fire Discipline.

By "Independent fire" the Drill-Book means, I take it, Quick fire. The Russians swore by volleys, the Turks by quick fire. Both sides practised the modes of firing on which they had made their stand throughout the campaign. General Todleben wrote:—"Such a shower of lead as that with which the Turks hail our troops has never before been employed as a mode of warfare by any civilised Army." As with nearly everything it was instinct, experience, confidence, and silent consent which induced the Turks to adopt this mode of fighting—not formulated rules. The awful effect of this kind of warfare is apparent in the Russian losses and in the fact that throughout the campaign the Russian attacks collapsed (with few and unimportant exceptions), numerical superiority notwithstanding.

"Movements are to be explained to the subordinate leader," says the Drill-Book. But it happens often that movements are the logical and immediate consequence of other movements or incidents immediately preceding them or contemporaneous with them; and there is generally no time for explanations, even if, the reasons being known (which mostly they are not), such an explanation could be forthcoming. Twice, in the second and the third battles, my battalion was sent to a distant part of the battle-field, but none of us knew clearly for what purpose until we arrived at the end of our journeys.

Section 125.—The Company in Attack.

"He [the captain] will personally control the fire, decide when it shall be opened." My experience is that the captain is not the proper man to decide this important question, that a far superior commander, the major, or the colonel, or the general, should do so—I mean in an action in which large numbers are engaged. I question, therefore, the wisdom of having this laid down as an official regulation in an official book. "To check wide or unsteady firing"—most of you well know that the tendency of men, when once given licence, is to blaze away, and herein lies the danger of magazine fire. At a manœuvre I saw in Germany, by some mistake the order "cease firing" was not given, and the men amused themselves by blazing away, until practically their stock of ammunition had been exhausted. "The frontage to be occupied," etc., says the Drill-Book, speaking of the frontage of attack. I think there can be only one rule: the frontage is to be adapted to the ground, or, in other words, the unit, whatever it may be, must fill out that piece of ground which command, circumstances, or fate allot to it. Unfortunately the ground does not always adapt itself to the formations, and therefore the formations must adapt themselves to the ground. In the second battle my company was called on to fill up a certain gap in a line which had already been formed, and the company had to be arranged accordingly. Under such circumstances, I need hardly say, the Drill-Book regulations cannot be obeyed in the slightest degree.

Section 126 deals with the battalion in attack. "All reinforcements to be from same unit." This is undoubtedly desirable, but if carried to excess, or carried out to the letter, it may prove fatal, inasmuch as reinforcements may not reach the spot they intended to reach, or may not get there at the time at which they ought to reach it.

Section 128.—Infantry in Defence.

"The front and flank should be without pronounced salients," says the Drill-Book. I am afraid that with this many authorities will disagree. The Turks disagreed with it most heartily, for their camp on all sides was one mass of salients. They made them wherever they could possibly do so. I maintain that the more salients a position has, the more difficult is the attack upon it. The easiest attack is that upon a position forming a perfect circle, square, or triangle, or upon any straight line or regular curve.

Under "Requirements of a Defensive Position," I miss any mention of villages, hamlets, or farms, both in friendly and in hostile country. I doubt if all the eight requirements given on page 149 could be found united in one position—the difficulty is to find or make a position in partly or entirely unsuitable country, and with this the Drill-Book does not deal. As regards farms, villages and hamlets, the Turks, instead of including a number of villages inhabited to the extent of one-half and more by men and women hostile to their cause, would leave them just outside the lines. According to the British Drill-Book they made a terrific mistake. The village of Opanetz was occupied by Bulgarians solely,

enemies of theirs. The lines of the Turks went as far as the village, and then made a detour round it, the village being actually just outside the Turkish lines. This may be a grave mistake, but it was the lesser of two evils; and if I had the making of the camp of Plevna again, under similar circumstances, I should make the same mistake again—if it can be called a mistake—for it worked very well.

I might mention one word as to the effect of rehearsals of any movements that are contemplated. It is a well-known fact that Todleben, previous to the last sortie, laid down an elaborate plan of reinforcements to be sent to any attacked part of his lines from any other part. These movements were rehearsed for weeks and with such accuracy that they could be calculated to a minute. To a minute it was known how long it would take to send a given number of men from one given point of the line of investment to any other given point. This was the death-blow to the Turkish Army in the last sortie.

Section 129.—Notes on Artillery and Infantry Fire.

"Artillery," says the Drill-Book, "may fight at the very shortest range." When on the defence, and when acting in conjunction with unbroken infantry, it can do so with tremendous effect, and ought to do so, and did do so in the second Plevna battle in the attack on the Regiment Pensa I have already mentioned.

Section 130.—The Employment of Artillery.

Artillery, the same as train, should, as a rule, be covered by the general situation—by the strategical situation when on the march, by the tactical situation when in action, and should not require escort. A once common device of deceiving artillery as to the range of hostile infantry is not mentioned in the Drill-Book among such devices, viz., for the whole body of men to increase their apparent height by standing upon stones, their knapsacks, or other objects one or two feet high. This was practised by the Turks, and I remember, when a youngster, having seen it practised by the now defunct Hanoverian Army previous to 1866. But since the Turkish campaign I have never seen this device adopted.

Section 132.—Supply of Ammunition.

No comments are called for here, since the instructions laid down are, to my mind, wholly applicable, and the question of the supply of ammunition, during an action, is so very important that it calls for a complex system of rules.

I am afraid I have rather over-rated my task; route-marching and night operations must be left out for the time being, but I may include them in the printed paper on the subject.

In conclusion, I may say that a layman, reading a Drill-Book for the first time, would gain the impression that warfare is a system of premeditated moves, laid down in regulations as exact as mathematical rules. But in war the unexpected always happens. In fact, the expected

hardly ever occurs, as I can say from experience; and to act in unexpected circumstances and under unforeseen conditions requires force of character, self-effacement, and readiness of resource, such as cannot be laid down in any tabulated system of rules and regulations, in any book, however well written, even if, like the British Drill-Book, it be the result of the combined wisdom of a great many highly trained intelligences.

APPENDIX.

The following is a *résumé* of the remarks which the lecturer had to leave out by reason of the shortness of time at his disposal:—

PART VI.—ROUTE MARCHING.

Section 133.—Order of March.

The advisability of letting the men know (approximately, or even merely by way of pretence) the destination and duration of each day's march is not mentioned, yet it exhausts more to march to an unknown place and for an unknown length of time, than to march with a given and intelligible object in view and for a given space of time, however long.

Section 134.—Place and Duties of Officers.

Tickets for men unable to keep up with their units. — Could not a similar system of tickets be pursued after an action, with stragglers, so as to avoid suspicions of desertion or skulking?

There is no mention in Secs. 133 to 141 of the important question of choosing halting places for resting, cooking, bivouacs, and so forth. Neither are there any instructions as to how to act under special circumstances: for instance, in a waterless country, in country swarming with marauders, in climates where the heat renders day marches impossible, and so forth. Lastly, there are no orders laid down as to how to act when on cross-roads two friendly forces happen to meet or cross—a most embarrassing occurrence.

No comment is called for on Secs. 142 to 153, Advanced and Rear Guards, beyond the general remarks made above; the instructions here given are clear, full, and reasonable. As regards the duty of rear guards to take up one defensive position after another and abandoning each before being attacked, a better example cannot be found than Macruder, Yorktown Peninsula, 1862.

PART VIII.—OPERATIONS BY NIGHT.

Section 177.—Instructions and Practice.

Watches ought to be set to a uniform time daily.

Section 178.—Marches.

Landmarks visible at night. — It might have been useful to mention the grotesque shape of trees, easily remembered by their

semblance to animals, faces, etc., and therefore recognisable at night, provided they show against the sky. It requires some practice to mark in daytime objects that will be visible at night.

Section 179.—Attacks.

Re Panics.—No mention is made of the fact that these are dangerously infectious, at any time, mostly so by night. Sistova, 1877.

Section 180.—Defence.

A force defending a besieged or invested position ought to be always prepared for night attacks, and the regulations for these ought to be rehearsed frequently during daytime. These rehearsals will rob night attacks of their imaginary terrors.

Lieut.-Colonel E. GUNTER, *p.s.c.* (late East Lancashire Regt.):—The lecturer is always welcome here; the lectures he has given us have an interest not only from his having taken part in a great war with unrivalled personal experience, but he has thought deeply about it, and has been good enough to give us the benefit of his thoughts; but when he comes here and—I suppose I must say—attacks our Drill-Book, one of our most cherished institutions, I think it behoves some of us to get up and say a word in its defence. The Drill-Book may not be all it should be—nothing is perfect in this world—but I have no hesitation in saying that there are pearls of wisdom scattered through its pages, even if there are no sallies of brilliant wit; and on the whole, what is of more importance, it has served its purpose. The Drill-Book has been in the hands of the officers and men of the Army since 1893, about five years. During that time the British Army has had many a tough fight, and I think on the whole we may say that the action of our officers and men in Chitral, in the Tirah, in the Soudan, and the fighting of such bodies of men as Houssas and others in different parts of the world, all trained on our Drill-Book, go to show, that, taking it as a whole, the teaching of the Drill-Book is not bad. I hope that there will be no very great revision of it yet, because I think it unsettles troops if they are perpetually having new drill regulations. Now I will take some of the points in detail, following seriatim the objections which the lecturer has made to it. We will take first the Section 113 with regard to guesses and calculations as being often very wrong. Still it would not do not to attempt to find out what the enemy's numbers and dispositions are. With regard to this, infantry as well as cavalry officers and men should be trained in the practice of reconnaissances, and to estimate numbers in position. That has been and is being carried out with great care in France; infantry scouts are being regularly trained to this. And there are many instances in war of successful reconnaissance. The reconnaissance of Lord Roberts in force before the battle of Kandahar gave him great information and knowledge, and lately the reconnaissance carried out before the battle of the Atbara shows how necessary and feasible it is to carry this out. Next, as to local engagements, I think the principle of advanced guards not bringing on local engagements is well inculcated in the instructions in our Drill-Book under that head, and, of course, special instructions can be given on the spot to every commander of an advanced guard, not to bring on a premature engagement. I may as well mention here (and this meets most of the objections) that the Drill-Book contains the reducible minimum of tactical instruction. If all the detailed instructions suggested were added to the Drill-Book, it would be a book of enormous size, a size I hope it will never become. Next, the lecturer says with regard to artillery, that its effect is over-rated. Well, that may have been the lecturer's experience. It is well known by artillery officers that the artillery of the Russians in 1877 was neither effective nor effectively handled. With regard to surprise by infantry fire being more effective than surprise by artillery fire, the

moral effect of artillery is greater. A principal instance of that is—and it is no doubt well known to the lecturer—the effect of the German artillery at the battle of Beaumont. I think he under-rates the immense progress which artillery has made since 1877. I have only to refer to the effect of the Howitzer battery the other day at Omdurman. I have no doubt he is aware of it. Most nations in future will have howitzer batteries and Q.F. guns in the field, so I do not think we are apt to over-rate the effect of artillery fire. He say that drill in barracks and on parade-ground does not teach, but suppresses, self-reliance in subordinates. He is criticising the Drill-Book, mind. Well, the Drill-Book says they are to be inculcated. It cannot do more. If the lecturer's experience is that it is not carried out, that is another matter; but I think our recent experiences at Chitral, in the Tirah, and on the Niger, show that we are making progress in that direction, and that our subordinate leaders are self-reliant. With regard to the three lines of assault, it is a big question. European tacticians generally advocate three lines in attack, and I suppose we are right in following them; it is the result of general experience. I do not think we can take example from those splendid soldiers, the Turks, of whom the lecturer was so gallant a leader, in matters of tactics. They fought splendidly, but if I had time to criticise I could show that though their courage was magnificent, their manœuvring power and tactics were not quite what they should be. With regard to the moral force and the study of battle psychology, nobody is better able to speak than the lecturer. On that subject I cordially agree with him. I do not quite understand his remarks as to stoppage of assault being generally fatal. If he means that there is to be no halting before a position, I agree with him; I have always said so. I think the assault, once committed to it, must go on; I think if there is much halting within about 400 or 500 yards of the enemy, in these days of breech-loaders and tremendous fire, we shall suffer fearfully. The next point is with regard to tier-fire; that, I think, is most desirable. It is dealt with in the fortification books, but I do not think the Drill-Book would enter into it very largely. I agree with him thoroughly as regards the importance of counter-attack. If there is a revise of the Drill-Book, that is one of the points which the authorities would do well to enlarge upon a little more. The subject of counter-attack was well brought out the other day in a lecture at Aldershot, and many authorities think that it might be dealt with more fully in the Drill-Book. The Drill-Book does not mention sudden outbursts of fire after absolute silence, but it does not say it is not to be done. It is impossible to give instructions for everything—something must be left to the commander on the spot. I do not think the Drill-Book can prescribe how and when firing is to be carried on—that must be left to the leaders on the spot. With regard to all ranks being taught to think, we are doing our best. I think our officers are working very hard, and that all ranks are improving in general intelligence. With regard to the retaining action, that again is a point which is left out of the Drill-Book. But I think if you were to enter into every possible kind of action that could occur, you would swell the Drill-Book to unwieldy dimensions. With regard to the company in attack, I venture to think the lecturer has made a slight mistake in reading our regulations. It says, "The captain is to decide when it should be opened, *subject to the orders of the commanding officer.*" He has left out that very important proviso in Section 125. If the commanding officer did not want him to begin firing until he orders it, he would give him instructions accordingly. It is probably meant that should no orders come, the captain is to have the initiative and be responsible for opening fire. With regard to the frontage to be occupied, I think something must be laid down, and I am glad it is laid down. There is a certain principle that governs frontage. The lecturer says it must depend on the ground. I do not see how it can be left to that where you have large bodies in line. A very high authority, who is no doubt well known to the lecturer, General von Schlichting, says there is a great tendency to make everything depend on the ground; but you must have certain definite principles in tactics, and some things must be laid down. If the

ground is unfavourable, you must use your common sense, and adapt the tactics to the ground. With regard to pronounced salients, I think, with due respect to the lecturer, the question has been debated very well by good authorities, who have on the whole come to the conclusion that pronounced salients are a mistake, for reasons there is not time to go into. In conclusion, I may venture to express a hope that if there is a revision of the Drill-Book, it will be put in the hands of capable officers under the immediate supervision of the Commander-in Chief, and not left, as it is sometimes, to a chance officer in a particular office. It is a very serious question changing the drill; and if the Drill-Book is revised I think a strong committee should be formed, in which artillery, cavalry, infantry, and engineers are all represented, under the presidency of a distinguished military officer.[1]

T. MILLER MAGUIRE, Esq., LL.D. :— As no other officer of the Regular force seems willing to speak, I trust you will allow me to make a few general remarks on the question under discussion. It would be quite impossible for anyone in the time that is taken to exhaust the sands in that glass before you, Sir, to follow all the admirable points which have been so clearly set forth by the lecturer. In the main, of course, I agree with the last speaker, that to go rushing at changing the Drill-Book might land us in a worse state than we are in already. I also think the last speaker was justified in saying, whatever the Drill-Book may be, that the men of the British Army have been doing very well indeed lately. I must begin by complimenting the lecturer on the strange and admirable versatility which has enabled him at such an early period of his career to play so important a part in the affairs of the world. It is not given to every man to have started life by the banks of the Elbe, then to have commanded the troops of Islam by the banks of the Danube, then to negotiate for commerce by the banks of the La Plata, and now to come to teach British officers how to make a new Drill-Book by the banks of the Thames. The Plevna campaign is unquestionably one of the most interesting in the annals of mankind, and it brings out the qualities of a race which has played a very important part in history very clearly indeed; and it explains how it was that at one time, in the time of Queen Elizabeth, for example, the banners of the Porte were flying from the Persian Gulf to Algiers, and were a terror as far as Vienna. My admiration for the Turks is great. From reading history I thought they were grand folk. I am quite convinced, if it be not through command of the sea, it will be a very hard job for any European Power to get into Constantinople. My theories about the Turks were confirmed by recent personal experience of many of them in their own land. I believe them to be the very best people in the Levant. I should be sorry indeed to see them superseded by either Armenians or Greeks. You can get fair play from a Turk, but you get very curious play from Armenians or Greeks. All through this campaign is interesting, and it is a pity that, as Lord Wolseley said, the Turks were in several cases given away. Notwithstanding all their betrayers, they would have utterly ruined Russia had the British joined them heartily, or had all the other Powers stood absolutely aloof. I think they were given away at the passage of the Danube, which was itself a very instructive and interesting episode in strategy and tactics. They certainly were not given away at Plevna after that celebrated march of Osman from Widdin. They were at first well served by Suleiman. The transfer of his troops from Montenegro to Enos Bay and thence to the Shipka was a very noteworthy incident. But it is a question if they were not given away by Suleiman later on. The lecturer has dwelt upon that insubordination which kept him knocking his head against the Shipka Pass, when, by a movement of his right, he might have joined Mehemet Ali on the Lom; or, by a movement of his left, he might have broken the line of Russians that were encircling Osman at Plevna. The learned lecturer has dwelt a good deal on the firing in this campaign. Well, there is not the slightest doubt that the abundant ammunition at the command of the Turks enabled them to sweep the country

[1] I intended to add that some further instructions for hill and savage warfare might be embodied in any revised Drill-Book, as the result of our recent experience. —E. G.

in all directions round their fortress with a shower of lead which could scarcely be traversed. On the other hand, the effect of the Russian fire was small indeed. The Russians, if I am not mistaken, fired 200,000 rounds of artillery and 10,000,000 rounds of infantry cartridges against Plevna. The lecturer will correct me if I am wrong in saying that only 30,000 Turks died at Plevna. Of these 30,000 Turks, I take it that two out of three died rather through sickness than wounds. Supposing only 10,000 died through wounds, a small sum in arithmetic will prove that it took about 20 shells or 100 cartridges or bullets to kill one Turk. Throughout this campaign the artillery was badly handled. The last speaker has spoken about the artillery at Beaumont; but there was a greater battle, won almost entirely by artillery, the battle of Sedan; practically the German infantry was not used at several of the most important phases of this engagement, and yet it was one of the decisive battles of the world. The Germans surrounded the wretched French soldiery who were in the bottom of the basin with batteries, and pounded them to bits. As a celebrated war correspondent said, it was a matter of a "plain covered by pieces of uniform pinned together with broken bones."

Lieut.-Colonel GUNTER:—I mentioned Beaumont in connection with surprise only.

T. MILLER MAGUIRE, Esq.:—I am not at issue in the slightest degree with the gallant colonel. He and I have agreed too long a time for that. I am only emphasising his views by saying that not only was there a surprise battle at Beaumont, but the complete ruin of an army at the decisive battle of Sedan. Throughout the 1877-78 campaign, the artillery did not do as well as in 1870, and the cavalry did not do well at all. We are constantly hearing ridicule heaped upon our own cavalry, but if we sneer at our cavalry we ought to break into guffaws of laughter at the Russian cavalry. The numbers were enormous. I do not know whether the learned lecturer will agree with me when I say I cannot remember whether it was of any importance in the campaign, after it had made the first raid under Gourko over the Balkans into the Valley of Roses. The campaign was well done by the infantry. Only 1 per cent. of the dead was due to artillery—99 per cent. of the dead Turks owed their fate to infantry fire. Another matter that we have heard a great deal about here lately is the commissariat. Some people would have us believe that our commissariat arrangements in the Wiltshire manœuvres were the very worst in the whole history of military races. But there was no commissariat worthy of the name in the Russian Army. They were only ten station attendants appointed to look after the whole theatre of operations, and that was not until the troops got to Constantinople. With regard to the medical arrangements, those of the Russians were disgraceful and ruinous in the extreme. The Turks did not require so much attention, because every man is a sanitary machine in himself—cleanliness is godliness among them—but the Russians required any amount of medical attendance, and got none. Outside the station of San Stefano, half the poor diseased wretches were lying in the mud, absolutely uncared for, and out of the vast army they brought across the Danube and the Balkans only about 50,000 were able to stand to arms before Constantinople, when the war closed. As a matter of fact, these were half starving, and miserably clad and in dire distress. Another important matter in connection with this war applies to us, that is, the question of sea power. The Russians having nearly reached Buyukdere, found that Admiral Hornby was outside. The reason the Russians did not get into Constantinople were two-fold—their miserable commissariat and medical deficiencies, and the British fleet, which has on several occasions played a prominent part in Eastern history, and which I trust will never be allowed to fall so low as not to hold its own by the shores of the Levant. I congratulate the audience on having such an interesting lecture, and on having as lecturer a man with such an ample knowledge of the war, and of such wide reading with regard to military questions as Captain Herbert.

Captain W. V. HERBERT:—I am quite sure that I never meant to attack the Drill-Book. I was asked to read the Drill-Book and compare it with my

own experiences, and I have done so. As a matter of fact, if I sat down to revise the Drill-Book I might alter one or two things, and add two or three things, and take away a few, but I am quite convinced my Drill-Book would, as a whole, be no better, would probably be a good deal worse than the British Drill-Book. Under route-marching, if time had permitted I would have mentioned that there is probably no Army in the world at the present moment which knows so well how to march in waterless countries, in hot climates, and in countries swarming with marauders, and which knows so much about night marching, as the British Army. I would pass it over by simply saying that it is absolutely impossible for me, although I have done marches of this description, to state anything which the British Army does not already know, and know far better than I do. I quite admit that the mobility of the Turks, their faculty to move, was faulty in the extreme; but tied to a place, as they were at Plevna, they were admirable. Striking in the open, I think they were not what they ought to be, and are less so, I understand, at the present moment. I quite agree with Colonel Gunter as to the stoppage of an assault; my experience is that its moral effect is extremely bad. There ought to be none, I should think, within 500 yards. I thank Dr. Maguire for his complimentary remarks. He mentioned the Armenians as a kind of corrective to the Turks. Well, I have known one or two Armenians—I do not want to know any more. The Danube passage was indeed sold. I had long a suspicion that the Russian crossing of the Danube at Sistova had been brought about by corruption and bribery. The proofs were furnished to me by no less an authority than Mr. Archibald Forbes, the war correspondent of the *Daily News*, who was at one end of the Plevna lines and I was at the other. He was stationed on the north-eastern part of the Russian camp, and I on the north-eastern part of the Turkish camp. Only the width of the neutral zone divided us in 1877, and we met again eighteen years later in Regent's Park. The Russian cavalry has been acknowledged by the Russian writers, notably by Kuropatkin, Skobeleff's aide-de-camp, to have been a dismal failure. The Turkish cavalry was worse than a failure, it was a nuisance. How little we regarded our cavalry may be apparent from the fact that we ate the horses at the end of the campaign.

The CHAIRMAN (Major-General Moncrieff):—I think there is one fact patent to all of us present, particularly officers who are serving, or have lately served, in the Army, namely, that our Drill-Book has come extremely well out of this ordeal. I am quite certain that when a new edition of it is published—and it is bound to come some day, because things must change (our skill and knowledge of war increase day by day)—we shall all agree with what Colonel Gunter has said that the very best heads possible will be put on the work of re-arranging the new Drill-Book. One cannot help feeling that when this excellent lecture which we have listened to to-day is printed and published by the Royal United Service Institution, everybody who takes an interest in such matters is bound to read it; and if he or they are employed in carrying out a new Drill-Book, this lecture in many of its points will be of extreme value. I am sure that we are all very much obliged to Captain Herbert for lecturing here to-day. It is not always that we meet with a man who has had the personal experience that he has had of the Russo-Turkish war, and it is very useful to us to have what occurred in these big battles round Plevna brought to bear upon this little volume. I suppose the Drill-Book was about eight times bigger when I was a young soldier, and there was nothing in it but drill. It was all filled, in a great measure, with intricate movements, laid down in the most precise manner. Now, it really is a good book with much information on practical soldiering. We all look forward to further improvement in future editions. I am sure that I am carrying out your wishes in giving a hearty vote of thanks to Captain Herbert for having come here and given this most excellent lecture, and for the great trouble and thought it has cost him to write it.

TO INDIA:
MILITARY, STATISTICAL, AND STRATEGICAL SKETCH.—PLAN OF FUTURE CAMPAIGN.

Translated from the Russian of B. T. LEBEDEV,

By Lieutenant H. C. HOLMAN, 16th Bengal Cavalry.

"The more powerful Russia becomes in Central Asia, the weaker does England become in India, and, consequently, the more amenable in Europe."—*A. Sobolev.*

INTRODUCTION.

PLANS OF EXPEDITIONS AGAINST INDIA.—ENGLAND'S TRADITIONAL AIMS AND THEIR COUNTERACTION BY OUR FORWARD MOVEMENT IN CENTRAL ASIA.—RUSSIA'S PRESENT SITUATION IN CENTRAL ASIA, WITH REFERENCE TO FORWARD OPERATIONS TO THE INDIAN FRONTIERS.—OUR PROBLEM IN CENTRAL ASIA.

THE question of the invasion of India is not a new one. From very early times Russian monarchs have turned their looks towards that prosperous country. The establishment of regular trade relations between Russia and the East, making her the intermediary between the East and the West, combined with the possibility of an exchange of our products with those of a colonial nature in India, was one of the problems which engaged us during the times of the Tsar Alexis Michaelovich, and of the Emperor Peter the Great. In 1675, Alexis Michaelovich sent Kasimov to India as ambassador to the Great Mogul, Aurangzeb. After traversing the wild regions of Central Asia, the Russian ambassador reached Kabul, whence he was compelled to retrace his steps. Peter the Great raised the question anew. He drew up a clear plan for the strengthening of Russian influence in Central Asia, through which lay the road into India. Thus, in 1717, Prince Bekovich Cherkasski's embassy set out for Khiva at the head of a detachment of 2,500 men, with the following objects:—

1. To direct the Amoo Daria along its old bed into the Caspian Sea, by erecting dams, barring its way into the Aral Sea.
2. To erect fortifications on the lower course of the Amoo Daria.

3. To propose to the Khans of Khiva and Bokhara the raising of half Russian and half Kirgiz detachments as body guards, to be maintained at the expense of these Khanates, but politically subject to our agents.
4. To survey the course of the river Amoo Daria up stream and find out a convenient route from the Caspian Sea into India.[1]

But all these good intentions of Peter's were not destined to be fulfilled; the embassy was annihilated in Khiva. The far-seeing Emperor then turned his energies in the direction of Persia, through which country many conquerors had entered India.

Catharine II., who deeply studied England's policy, was not unmindful of distant India. In 1791, St. Jeni proposed a plan of campaign against that country, which the Great Empress found worthy of serious consideration. The first act of this campaign was to have been a manifesto concerning the restoration of the Great Mogul to the throne of India; the second, an advance across the Steppes from Orenburg on Bokhara and Kabul. The realisation of this plan was to have been entered upon in 1796, but in that year the Empress died.

Some years afterwards, in 1800, the First Consul proposed to the Emperor Paul I. a plan for a combined expedition against India with the same object, *i.e.*, to drive the English out of Hindustan, free the beautiful and rich regions of that country from the British yoke, and open up new markets for the manufactures and trade of civilised European nations. The plan was that 35,000 Frenchmen were to proceed down the Danube to the Black Sea, crossing the latter and the Azov Sea to Taganrog, whence they were to march to Tsaritsin, and there embark for the journey by the Volga and Caspian Sea to Astrabad. There the French were to unite with a Russian Army of the same strength as theirs. The two were then to move together across Khorasan and Afghanistan *viâ* Meshed, Herat, and Kandahar. This plan was destined to remain unfulfilled, principally, no doubt, because the war with Austria, which ensued after the Parsdorf armistice, drew Bonaparte away from its prosecution.

In the following year, 1801,[2] came Paul's attempt to carry out the above plan of campaign by himself. He detailed 22,500 Don Cossacks for the purpose. In autograph letters to the Ataman of the Don Cossack troops, General Orlov, the Emperor Paul wrote[3]:—"I entrust the whole of this expedition to you and your troops. Get them together and march to Orenburg; thence, by the best of the three routes, or by all, proceed, with artillery, straight across Khiva and Bokhara against the Indus, and the English establishments situated thereon. The troops of that region are similar to yours; thus, with artillery, you will have every advantage. Prepare everything for the campaign. Send your scouts ahead to prepare

[1] "History of Russia," by S. Soloviev, Chap. XVIII., pp. 1—39.

[2] 12th January, 1801.

[3] "The Anglo-Afghan Conflict," by A. Sobolev.

or survey the roads. All the riches of India will be our reward for this expedition. Concentrate the troops at the southern stations, and then, having reported to me, await orders to proceed to Orenburg. Having reached Orenburg, you will await orders to proceed farther. Such an undertaking will crown you all with glory, and will merit, according to your services, my special favour. It will bring us riches and trade, and strike the enemy in his heart. I herewith send you all the maps I have. They only go as far as Khiva and the Amoo Daria. Beyond these places it will be your business to get information about the Indian peoples."

In another letter he said:—"I send you a new and detailed map of India. Remember that you are only concerned with the English, and that you are at peace with all those who do not help them. Assure the latter, *en route*, of the friendship of Russia, and go from the Indus to the Ganges, and there fall upon the English. On the way, secure Bokhara against possible Chinese enterprises. In Khiva you will release our imprisoned subjects. If infantry are required, I will send them after you, but it will be better if you can manage with the force at your disposal."

On the 27th February, 1801, the Cossacks set out from the Don. On the way to Orenburg they suffered fearful hardships on account of frost, snowstorms, and the exceedingly bad condition of the roads. The troops underwent special privations on the march through the Saratovsk district, owing to the famine in that year. Farther, beyond Orenburg, still greater troubles were in store for them. On the 25th March, however, Orlov heard of the accession to the throne of Alexander I., and received orders to bring the Cossacks back to the Don.

After the meeting at Tilsit, Napoleon again raised the question of allied Franco-Russian operations in Asia. In the letter quoted below, dated 2nd February, 1808, he suggested to Alexander that they should crush the British monarchy in the source of its wealth—India. "Will it please your Majesty to hear the advice of one who is closely and sincerely attached to you. It is absolutely necessary for your Majesty to drive the Swedes away from your capital, and to extend your frontier in that direction as far as you wish. I am prepared to help you by all the means in my power. A Franco-Russian, and, perhaps, partly Austrian, army of 50,000 men, entering Asia, *viâ* Constantinople, would hardly reach the Euphrates before England would tremble and bow to the Continent.

"I am firm in Dalmatia, your Majesty on the Danube. A month after we have come to an agreement our army can be on the Bosphorus. The blow will be felt in India, and England will be non-plussed. Everything can be decided and signed by the 15th March; by 1st May our allied troops can be in Asia, and your Majesty's troops in Stockholm. Then the English, threatened in India, and driven out of Livonia, will be crushed by the weight of events."

The Emperor Alexander I. replied:—"I think your Majesty's views are both grand and true. It was your great genius which conceived such a comprehensive plan. It is to your genius that its realisation should be left. I have quite candidly communicated the interests of my

Empire to General Kolenkur, and he is empowered to lay my opinions before your Majesty. They have been considered from all points of view by him and Rumianetz, and, if your Majesty agrees with them, I will furnish one army for an expedition to India, and another to co-operate in securing sea-board places in Asia Minor. At the same time I will enjoin my fleet commanders to work entirely in harmony with your Majesty."

It may be deduced from these letters that an expedition against India was desired by both Emperors. Complications in Spain, however, followed by war with Austria, and the final rupture between Napoleon and Alexander, brought the former's designs to nought.

In 1854, Platon Chicachev wrote an article concerning the possibility of a Russian expedition to India. In it the whole undertaking against India was divided into two sharply defined periods, the first of which was to have ended with the advance of an expeditionary force of 15,000 men from Astrabad to Herat, whilst the second was to have witnessed the direct advance of 30,000 men to Lahore, on the Ravi, the very centre of the Punjab, *viâ* Kandahar, the Suleiman Mountains, and Dera Ismail Khan. This plan was based on an understanding with Persia, and with the peoples of Afghanistan and the Punjab.

Assuming an advance on Herat, Kandahar, and the Indus, Chicachev said that the problem of an Indian campaign would have been made easier, if an advance could have been made from Orenburg, for, in such case, a considerable contingent of auxiliary cavalry and a large number of camels would have been available. With these under the command of a few Russian officers, it would have been possible to make, simultaneously with the advance of the main force to the Indus, a number of demonstrations in the direction of Balkh, and the Bamian or Anderab gorges, so as to distract the attention of the English generals in the Punjab from the selected point and time of our march through the passes of the Suleiman Mountains. But Russia's position at the time was such that Chicachev himself did not consider the combined advance from the north practicable.

In 1855, General Khroolev proposed a plan, similar to the comprehensive project of 1800, *i.e.*, the line of operations was to have been through Astrabad, Meshed, and Herat. The conclusion of the Crimean campaign caused us to renounce this plan.

After the Crimean War, in which England was our chief enemy, and the organiser of a coalition against us, the object of which was to arrest our success in the direction of India, Russians clearly understood England's policy, and the Emperor Alexander II. drew up a strict programme for a steady advance to the frontiers of India, so that, in case of necessity, we might deal our sworn enemy a fatal blow.

The determined advance of the Russians in Central Asia commenced immediately after the Crimean War. Tashkend was occupied in 1865; Samarkand in 1868; Khiva was subdued in 1873, and Kokand in 1876. In 1876, Skobolev, at that time Governor of Ferghana, sent General

Kaufmann, the Military Governor of Turkestan, a complete plan for the invasion of India. Speaking generally, this plan was as follows:—

1. To open negotiations with the Ameer of Kabul, backing them up by despatching troops to his capital.
2. After occupying Kabul, to establish relations with all malcontents in India, giving them the organisation and general guidance which they lacked in 1857; then, to collect a mass of irregular cavalry and send them into India under the "banner of blood and fire," as in the time of Timur.

This plan should have been carried out after the campaign of 1877-78.

Our rapid advance into the heart of Central Asia caused terrible alarm in England. She again sought to arrest Russia's success in Central Asia; her agents kindled the conflagration in the Balkan Peninsula, and Russia was drawn into the war with Turkey of 1877-78.

England had not the strength to decide upon active participation in this war; not only because of her weakness, but also for fear of a demonstration by Russian troops in the direction of India. She, therefore played an under-hand game, and only declared herself at the Berlin Congress.

As an answer to the hostile attitude of England, active operations were to have been commenced in Afghanistan before the conclusion of the Berlin Treaty. Three columns started from Petro-Alexandrovsk, on the Amoo Daria, Samarkand, and Margelan. The first column (under General Grotengeln) ascended the Amoo Daria to Charjui; it was to have been joined by troops from the Caspian, and was most probably intended for operations against Merv and Herat. The second column (General Kaufmann's) was to move across Bokhara to the Amoo Daria, and thence to Balkh, Bamian, and Kabul. The third column (General Abramov's) started from Ferghana, crossed the Alai Mountains, and was to have traversed the Pamirs in the direction of Kashmir and Chitral.

The Berlin Treaty stopped these operations at the outset. Moreover, the comparative weakness of the three columns, 20,000 men in all, shows that there was no question of an invasion of India. A simple demonstration towards her northern frontiers was all that was intended.

The impending Russo-Afghan alliance greatly troubled the English, because the feeling in India in 1878 was such that very little more was required to cause a rising of the people. Englishmen themselves say that the natives of India were at that time possessed by the spirit of a storm, and that England lived through a time of terrible danger.[1]

Russia's successes in Central Asia were not stopped by the Russo-Turkish War. The immediate result of England's opposition to us was a series of operations in the Turkoman Steppes. In 1880, a big expedition under Skobelev was sent to Akhal Teke, which was annexed. Merv was annexed in 1884.

[1] "The Anglo-Afghan Conflict," by A. Sobolev. There is no foundation for this assertion.—TRANSLATOR.

The annexation of Merv raised a storm in England as well as in English circles in India. The English succeeded in inclining the Ameer of Afghanistan to the conviction that it was necessary for him to adopt serious measures for strengthening the northern boundary of the Herat Province. Abdur Rahman considerably strengthened this frontier, and even moved it far forward, occupying Penjdeh, an important strategic point, which had never belonged to Afghanistan. But, on the 18th March, 1885, a small Russian detachment defeated a large Afghan force on the banks of the Khusk River, capturing its guns and standards, and putting it to flight. This Russian victory poured cold water on the overheated English, and, instead of serving as a *casus belli*, conduced rather to the cause of peace.

This may be attributed to England's weakness as a military Power, and to the exceedingly difficult position in which she is placed in India by the continual approach of Russia towards that peninsula. Skobelev said that even the occupation of Herat by us, after the victory over the Afghans, would not have resulted in a declaration of war by England. He contended, on the contrary, that our capture of Herat would have made a close understanding with us most desirable for England, because her position in India would have been so much weakened thereby, that the natives would have become difficult of management.

Being unable to enter into open war with Russia, England again had recourse to her habitual policy of intrigue, with the object of once more arresting Russian success in Central Asia. The Rumelian revolution, brought about by England, had no other aim.[1]

In the course of the last 20 years, the conditions affecting our advance on the Indian frontiers have changed considerably. In 1878, General Kaufmann's line of communications would have started from Orenburg, 1,056 miles from Samarkand; now, since the construction of the Trans-Caspian Railway, it would start from Merv,[2] Samarkand, or Margelan. The Turkestan and Caspian military districts are now connected with each other by an entirely Russian railway, and with Russia by a sea, which, in its turn, is connected by rail with all the interior communications of the Empire.

In 1878, Krasnovodsk was separated from Herat by an almost impassable region of scarce oases, peopled by hostile tribes; now the railway traverses the Karakum Desert and connects the Caspian Sea with the Amoo Daria, and Krasnovodsk with Merv, Samarkand, Tashkend, and Margelan. Consequently, thanks to uninterrupted steam communication between our Central Asian provinces and European Russia, we can operate against Afghanistan and the English, not only with the limited resources of the Turkestan military district and the Trans-Caspian province, but with the whole mighty forces of the Empire.

[1] A belief due, no doubt, to inability on the part of a Russian to understand that freedom in our political institutions which allowed our liberal papers to express sympathy with States struggling for their independence.—TRANSLATOR.

[2] From Kushk, since the completion of the railway from Merv to Kushk.—TRANSLATOR.

Since 1885 we have established ourselves almost at the gates of Herat, whilst the Anglo-Indian outpost is no further forward than Chaman, about 450 miles from the same point. To the north, our advanced posts stand on the "Roof of the World," in view of the snowy ramparts of the Hindoo Koosh. Thus, the chances of a successful Russian advance into Afghanistan have become very much greater.

The continual gravitation of Russia towards India, made manifest by the numerous plans for expeditions into that country, all of which have remained unfulfilled for various reasons, and the constant Russian advance in Central Asia, which Rawlinson compares to the laying of parallels in the siege of a fortress, have roused England's fears for the safety of her possessions in India, and made the English our sworn enemies—enemies who systematically strive to thwart Russian policy in the East.

England's fleet is almost invulnerable to us, and it is well understood in London that it is only in her Asian possessions that England has seriously to fear us. Thus, our problem in Central Asia is to take up a still firmer position in that part of the world, so that we may be in a position to act, if our enemy shows us such hostility as she did at the time of the Crimean War and the Berlin Congress. The occupation of Herat, followed by that of Kandahar and Kabul, and, finally, the absorption of Afghanistan into our sphere of influence, must be our further steps in Central Asia. Russia's interests demand such action, and we should not refrain from it.

CHAPTER I.[1]

Limits of Russian and English Interests in Central Asia. The Theatre of Military Operations.

Russia is nowhere contiguous to the actual possessions of the British Indian Empire. Between the two lie China, with the Kashgarian and Tibetan Deserts, the hardly accessible regions of Kashmir and the Hindoo Koosh, and finally Afghanistan, a land of mountains and sandy valleys.

Upon our appearance in Turkestan, the Indian Government took upon itself to cover its frontier. Partly by bribery and partly by force, England extended her power in Baluchistan and Afghanistan, and concluded highly advantageous treaties with the Khan of the former in 1876, and with the Ameer of the latter in 1880. Pretexts for further extensions of frontier were furnished by various outbreaks. The result is the present situation: the frontier on the west extends to the Western Suleiman Mountains; all the important passes are held and fortified, and all the territory on the right bank of the Indus is connected with the important strategic centre of India by a net-work of railways. In conformity with their above-mentioned policy, the English have laid their hands on Kashmir, Kanjut, Gilgit, and the small States east of the Kunar River. Thus, between their administrative frontier and ours lie States, independent as regards their internal administration, but under British protection.

[1] The "Review of the British Monarchy" has been the main authority for statistical details.

These do not form an integral part of the Indian Empire, but they will be the theatre of warlike operations, because through them lie the shortest routes from Asiatic Russia to India, and our entrance into them will be regarded by Great Britain as an act of hostility.

In accordance with the treaties of 1887 and 1895, a frontier has been laid down between our possessions and dependencies on one side, and the territories situated within the sphere of British interests on the other. This boundary line extends from China approximately along a parallel through Lake Zorkul, then along the Pamir and Amoo Daria Rivers to the basin of the Kham and Ab, whence the frontier is definitely marked by boundary pillars as it trends in a south-westerly direction to the Kushk River, where it touches the most southerly point of our Central Asian dominions—52 miles in a straight line from Herat. Thence it turns in a north-westerly direction to the Hari Rud, which it touches at the northern entrance to the Zulficar Pass. Thus, the extremities of the dividing line of Russian and British interests rest in China on the east and Persia on the west.

The character of the western provinces of China makes them a good buffer for India against Siberia. Persia, however, owing to her internal weakness and comparative proximity to Russia, fulfils the same service in a far less satisfactory manner.

To the south of the above-mentioned boundary extends a vast area, which must be the scene of the struggle between Russia and Great Britain for India. The forward movement of Russia in this area will, in all probability, be carried out step by step, precisely as we have advanced in Central Asia. Herat, Kandahar, and Kabul, will fall in the order named; Afghanistan will follow, and, finally, India's turn will come. But where can we put a limit to our forward movement? Where is the point, the possession of which will decide the fate of India?

Looking at the map, we see that the northern frontier provinces of India—the Punjab and Scinde—are separated from the rest of India by the Rajputana Desert, which would render the movements of troops, especially in large numbers, very difficult. The only favourable route to the valley of the Ganges lies through the Sirhind district of the Punjab, a narrow, fertile tract of land between the Rajputana Desert and the Himalayas. Once through Sirhind, the richest and most fertile provinces of India are easily accessible. The very name "Sirhind"—head or key of India—is justified by history. All a conquerors of India took it as a trophy after victories about Delhi. Thus, on the east and south, the limits of the theatre of military operations may be taken as the Jumna, the Aravalli Range, and a line from the latter to the Gulf of Cambay.

One of the serious obstacles in the way of our armies on their march to the Indus will be the Hindoo Koosh. This continuous and, for the most part, eternally snow-covered range starts from the highest Asiatic tableland—the Pamirs (12,000 to 14,000 feet high)—extends all across Afghanistan from east to west, and enters Persia. At first, under the name of the Hindoo Koosh, it trends in a south-westerly direction and, for 400 miles, forms a barrier of perpetually snow-covered peaks of

20,000 feet, with passes at altitudes of 12,000 to 14,000 feet. Then, under the name of the Koh-i-Baba, with lower altitudes, but still touching the snow-line, it extends for 130 miles to the sources of the Hari Rud and Murghab, where it splits up into various branches, which gradually decrease in height. The northern branch forms the elevated right bank of the Murghab. The central branch, the Safed Koh,[1] follows the right bank of the Hari Rud. The southern branch, the Siyah Koh range, is the highest on the way from the Trans-Caspian district into Afghanistan, *viâ* Herat.

Many branches extend southwards from the Siyah Koh to the valleys of the Helmund. The Hindoo Koosh and Koh-i-Baba ranges are, owing to their height, the most difficult to cross, but they did not keep the conquerors from the north out of India.

The mountains of Afghanistan south of the latitude of Balkh are not so high, but their passability is rendered difficult by the number and breadth of the off-shoots which must be crossed. The most practicable ranges in Western Afghanistan are those which lie to the north and south of Herat; over them lies the best route into Afghanistan. South of the bounding ridges of the Hindoo Koosh and Kara Korum extends a rocky region, full of high ranges, and extending to the plains of the Punjab, and the valleys of the Kabul River. The River Indus divides this district into two parts—Kashmir on the east, Kafiristan and Kohistan on the west.

Kashmir is intersected by three parallel ranges at right angles to the trend of the Indus, the Kara Korum Mountains, and the Tibetan and Indian Himalayas. The height of these mountains makes them a most formidable barrier. The Kohistan and Kafiristan ranges, though of lesser height, are not easily passable. South of the Kabul River, and parallel to it, runs the lofty Safed Koh range, south of which again extend two mountain chains, one in a south-westerly direction—the Western Suleimans, and the other in a southerly direction—the Eastern Suleimans. The former and more lofty range forms a continuous watershed between the purely Afghan rivers and the tributaries of the Indus.

Between the Western Suleiman Mountains and the Gul Koh range lies the Ghazni Plateau. The Eastern Suleimans are intersected by deep gorges, through which the rivers make their way to the Indus. South of 30° N. latitude, the Eastern Suleimans decrease in height, branch off into numerous parallel ridges, and trend to the west to join the Western Suleimans. About this point of junction there are several lofty plateaux. The Suleimans are considerably more accessible than the Hindoo Koosh, and the ranges south of the latter.

South of the Suleimans and the more westerly Afghan mountains lies Baluchistan, a plateau with an altitude of 4,000 to 6,000 feet, connected with India by easy passes. Independent operations for the invasion of India are not to be thought of in this direction, because Baluchistan is a desert, bounded, on the west, by the Persian mountains, on the south,

[1] Its western and lower portion is called the Parapamisus and Borkhuta.

by the Siyani Koh and the Koh-i-Siabz, and, on the east, by the branches of the Suleimans.

Baluchistan, with its sands and lack of water, is a very difficult country to cross. However, our latest information, of which we will speak hereafter, proves that a detached force of 10,000, 15,000, or even 20,000 men, could easily traverse this desert.

The theatre of operations is bounded on the north-east by the Himalayan Mountains, which, by reason of the altitude of their passes and their extent of 130 miles, may be numbered amongst the most inaccessible mountains in the world.

South of the above-mentioned mountains and east of the Indus stretches the Indo-Gangetic Plain, the surface of which may be considered to be practically level.

The principal river on the north of the "theatre" is the Amoo Daria, which, above the River Vaksh, has a breadth of 140 to 268 yards, widening out between that tributary and Kelif to 514 yards. The Amoo Daria is navigable almost as far as the Vaksh during May, June, July, and August. Of the tributaries on the left bank, only two, the Kochka and Kunduz, actually reach the Amoo Daria. The others, for instance, the Khulum, Maimana, Murgab, and Hari Rud, exhaust themselves before reaching the main stream. The Rivers Kha Rud, Ferrakh Rud, Khash Rud, and Helmund belong to the basin of the Seistan lakes. The first three dry up almost entirely in the hot weather, but the Helmund, with its tributary the Argendab, has a continual flow.

The whole of the eastern "theatre" belongs to the vast basin of the Indus; the latter, entering India near Torbela, flows, from Attock to Kalabagh, between high, rocky, cliffs and precipitous banks which attain a height of 700 feet, and are from 330 to 400 yards apart. The rate of flow is $7\frac{1}{2}$ miles an hour.

Below Kalabagh, the river emerges on to the plains. At high water *i.e.*, from about the 15th May to the end of August, the river rises in the Attock defile to a height of 49 feet above the mean level at other times of the year. This high water results in floods on the plains. These floods extend, below Dera Ismail Khan, from 14 to 15 miles. In winter, the average breadth of the bed of the Indus does not exceed 920 yards. The construction of bridges is rendered difficult, on the portion above Kalabagh, by the rapid current and sudden rises, and, from Kalabagh downwards, by the nature of the low banks, and by the breadth of the river bed, which is constantly changing with the flow of water.

At the present time there is only one permanent bridge, at Attock, over the Indus, within the limits of the Punjab. This is a railway bridge, which is also adapted for ordinary wheeled traffic. There are bridges of boats at Khushalghur, Kalabagh, and Dera Ismail Khan, but these have to be broken up during the high-water months, and also whenever there is a sudden rise. The Indus is crossed at most places by means of boats.

On its right bank the Indus receives the Shyok, Gilgit, Kabul, and Kuram Rivers. The Kabul River with its tributaries—the Swat, Kunar, and Alingar—has a particularly large volume of water. All other rivers

with any considerable course among the Suleiman Mountains completely disappear on emerging from the same. Among them are the Gomul, with tributaries Zhob, Nari, Bolan, and Mula.

On its left bank the Indus receives the Jhelum, Chenab, Ravi, Beas, and Sutlej. These are inferior to the main river both in volume of water and breadth of bed. They are, however, in flood at the same time as the Indus, and their flooded area is little less than that of the latter.

The bases for the advance of Russian armies into Afghanistan and India will be the Trans-Caspian and the Turkestan military districts, which are connected with each other, and with European Russia, by railways and sea and river routes.

The Trans-Caspian district is poorer in many respects than the Turkestan military district, but is, in itself, a more favourable base, because it is directly connected by rail with the Caspian Sea—our primary base—and in it is our nearest railway terminus to India.

From these bases there are only two possible routes for the advance of large masses of troops across the mountains bounding India on the north and west. These are :—

1. The route across the Trans-Caspian district, thence *viâ* Herat and Kandahar. This is the principal route connecting South-Western Asia, and, through it, Europe, with East India. It is practicable throughout for wheeled vehicles and artillery. It touches on the most populous parts of Afghanistan and Persia, and has an abundance of water, transport resources, and provisions, with a sufficient quantity of fodder and fuel.

2. The other important route leads from the Turkestan military district across Bokharan territory, *viâ* Mazar-i-Sherif and Bamian, to Kabul. This route cannot be compared to the former in quality. It crosses the colossal Hindoo Koosh barrier by a pack road, over which wheeled vehicles can only be dragged with extreme difficulty.

There is also a direct route from Herat to Kabul along the Hari Rud, but it is at present hardly explored, and leads through the territory of independent tribes.

Besides the routes indicated, there are others which, however, owing to their difficult nature, could only be made use of for minor co-operative movements.

CHAPTER II.

THEATRE OF MILITARY OPERATIONS.—THE NORTHERN AND NORTH-WESTERN FRONTIER.—THE POLITICAL SITUATION, PEOPLES, AND ARMED STRENGTH OF BRITISH INDIA.

India has an immense significance for England. It is in India that the vast amount of England's surplus capital finds an advantageous field for investment, and English industry a market for its products. India is the mainstay of London's trade, and it is in the service of her Government that the surplus members of England's educated class seek employment. The possession of India gives England an enormous commercial advantage throughout the whole of Asia. English trade could hardly maintain its

present exalted position in the East, if England were to lose her political supremacy in India. The chief prop of the British Empire would fall with the loss of India, which would mean England's reduction to the status of a second-class Power.

Let us now review the frontier, peoples, armed strength, and fortified points, and consider whether they are sources of strength or weakness for the English in India.

Not counting protected States, the British Indian Empire covers, at present, an area of 76,000 square geographical miles.

The land frontier of the theatre of military operations starts at Cape Mons, whence, running northwards, it ascends the Pab, crosses the Khirtar Range, and then turns north-east across the Cutch Desert. After this, it runs north along the foot of the Suleimans, parallel to, and at a distance of 18 to 46 miles from, the Indus. After crossing the Kabul River, the frontier line trends steadily eastwards, passes along the Peshawar Valley, at the foot of the hills, cuts the Indus at Torbela, and then again runs north, ending at the upper extremity of the Khagan Valley, in the midst of the Himalayas. The whole of this line is known as the North-West Frontier. On the west it presents a front to Afghanistan, through which lie the shortest and best routes from our territory into India.

The northern frontier starts from the upper extremity of the Khagan Valley, goes straight south to the Jhelum River and then, turning east, practically runs along the foot of the Himalayan Range.

At the present time there exists another new "scientific north-western frontier," created by the efforts of Lord Dufferin and Sir M. Durand. This frontier separates the territories of the Ameer of Afghanistan, and of the unruly mountaineers, from those regions which either belong to Great Britain[1] or have been actually occupied by the English in their frontier expeditions. A part of this scientific frontier, north of Kabul, has not been defined yet, but, as early as 1893, at the time of Sir M. Durand's visit, Abdur Rahman gave an unconditional promise to refrain from interference in the affairs of Chitral, Bajour, Swat, and Afridiland. He consented to the definition of the frontier line between the Afghan dominions and the countries over which the Indian Government intends to extend its authority, viz., the Kuram Valley, Waziristan, Gomul, and Zhob.[2] At present this frontier line leaves the administrative boundary at Thal, descends the Kuram River to Zirvan, and then, going southwest, and cutting the Tochi River at Machagun, it turns south to the upper waters of the Dua-Gomul. It follows this river, and then crosses Zarmelan by the valleys of the Gomul and Zhob to the neighbourhood of Talkhan Kot, whence it turns west to the River Kadanai, follows the same to the Khodja Amran ridge, and runs along the latter in a southerly direction to the neighbourhood of Nushki. It then goes east to Darwaza Station on the Scinde-Pishin Railway, whence

[1] By the Treaty of Gandamak, and Convention of 1876, as regards Pishin and Sibi; and by Conventions of 1882 and 1883, as regards the acquisition of Quetta from the Khan of Kelat.

[2] "The Ameer Abdur Rahman," by Stephen Wheeler, London, 1895.

it proceeds south-east to join the old frontier near Jacobabad. The territory included by the above-mentioned new frontier went to the English. The people were made British subjects by treaty, pacification, or force. The country was surveyed, mapped, and improved, as far as communications are concerned, but it has not yet been reduced to thorough order.

The consequence of the above is that the Suleimans are not now in front of, but behind, the English defensive line which, consequently, requires a smaller number of troops and fortified points than formerly. The attacking force must now force, instead of only having to seize, the passes.

The first fight will not take place on the Indus, but between the Khodja Amran Range and the Helmund. If this battle is lost, the advancing force will, in its further progress eastwards, have to overcome not a few difficult and dangerous obstacles, and carry more than one fortified position. In his article, "The Scientific Frontier of India," George Curzon says that England's routes to Kandahar have been shortened and rendered as easy as possible, and that, in the event of a Russian movement for the seizure of Herat, the English could easily carry out a similar movement for the occupation of Kandahar, Ghazni, and Kabul. The delimitation and organisation of the new scientific frontier of India have taken the sting out of the possible seizure of Herat, and Herat itself ceases henceforth to be the key to the valley of the Indus.

The extension of the frontier northwards from Peshawar, *i.e.*, the occupation of Chitral, and of territory belonging to tribes east of the Kunar River, is intended to safeguard the northern mountain passes, for a rising of the tribes in those parts would threaten the communications of Anglo-Indian troops operating on the right bank of the Indus.

The English certainly do not place Chitral in the same rank with Kandahar and Kabul, but they look upon it as a flank bastion, carelessness in the defence of which might endanger the main front.

The census of 1891 put the population of the British Indian Empire at 288 millions. The greater part of the people, 170 millions, inhabit the Deccan.[1] There are 8 millions in Burma. The average density is 3,808 per square mile, but the English provinces are twice as thickly peopled as the vassal States.

As a result of the various changes which have been at work for many centuries, the tribal divisions of the population, originally very numerous, have now disappeared. The Hindoo knows no tribe. Caste has completely replaced the latter. He only considers himself at one with those who bear the same caste designation as himself. A villager does not reckon as brothers those fellow-villagers who are of a different caste. On the contrary, he avoids all intercourse with them.

Counting the minutest differences, there are 140,000 separate caste denominations in India, but of these only 207 can boast of more than

[1] The author presumably means the Madras Presidency, including the Deccan. The Deccan, strictly speaking, means the Nizam's dominions and Berar, the population of which approaches nothing like 170 millions.—TRANSLATOR.

100,000 members each. These again are divided into sub-castes, which have no intercourse with each other.

It is caste prejudice which prevented the Hindoos from resisting foreign invasion. At the present time, however, the abolition of slavery and serfdom has raised the moral tone of even the lowest natives and created in them a knowledge of justice. Literature, inventions, and a thousand other changes in their daily life, which commenced with the introduction of the English Government, and, above all, the railways, are beginning to draw the castes closer together, and to smooth over their traditional differences.[1]

In the northern districts, the Mahomedan conquests did much towards sweeping away caste divisions.

With reference to religions, the population of the British Indian Empire is divided as follows:—

Hindoos	208,800,000
Mussulmans	57,400,000
Aboriginal	9,000,000
Buddhists	7,000,000
Jains	1,500,000
Sikhs	2,000,000
Christians	2,300,000
Others	300,000
Total	288,300,000[2]

[1] The author's theories on the subject of race and caste among Hindoos show that his knowledge on the subject is not based on experience. He states that caste distinctions have absorbed race distinctions. This is not true. For instance, a Dravira Brahman of Madras has absolutely nothing in common with a Kanoujiya Brahman of Benares, or a Sarsut Brahman of the Punjab, yet all three are Brahmans. This all dislike and mistrust each other. The Rajputs of Rajputana look down on the Rajputs of Hindustan, and they will not feed together. The Jat of the Punjab will have nothing to do with the Jat of Central India. The same feeling exists among Mussulmans, though in a lesser degree. The Pathan despises all Indians, whether Punjabis, Hindustanis, or Deccanis. Punjabis have a poor opinion of Hindustanis, and the latter of Deccanis. The atta (flour) eater holds the rice-eater in contempt, and all four speak different languages, Urdu being only the language of diplomacy and business. It is equally untrue to say that a villager does not reckon as brothers those fellow-villagers who are of a different caste. The feeling implied by "my country" is much stronger than that in "my caste." The Sikh and Punjabi Mahomedan, who are both Jats by race, get on very well together, and so do Hindoo and Mussulman Rajputs. A religious argument or festival will arouse their fanaticism, but, for all that, their differences do not greatly affect their social life except in the matter of shaving, preparing food and drink, smoking the same pipes, and marriages. The author says that castes are beginning to draw closer together, and to smooth over traditional differences. This is so to a very superficial extent, but the true feelings of the people are well shown by the recent riots in Madras, where the attempt of the low caste, but pushing, Shanars to gain admittance to the temples was opposed forcibly by the outraged orthodoxy of the South.—TRANSLATOR.

[2] "Review of the British Monarchy."

Hinduism can scarcely be called a religion; it is a congerie of religions.—TRANSLATOR.

The Hindoo religion—the support of the caste exclusiveness of the population—serves as but a weak tie between its followers.

The Hindoos have a numerical superiority over other religious denominations in all provinces and vassal States, except the Punjab, Kashmir, and Burma. Islam is predominant in the two former, and Buddhism in the latter. The number of Mahomedans living in India makes her the first Mussulman kingdom in the world.

The British population of India in 1891 was 162,000 souls. Englishmen do not willingly go to India. The majority of them appear there as temporary guests. They strive to earn a competency as soon as possible and then return home with their savings.

With regard to the characteristics of the English population, it will be sufficient to say that half of it is made up of the military element.

Let us now refer to the relations between the native population and the English. These may be summed up thus: the English power rests on a volcano. The rule of Great Britain in India is maintained by the brute force of the English and the fear of the people. If the natives throw off their fear, brute force will not avail the English, who are incapable of gaining either the love or the respect of Asiatics.

England, unlike Russia, has no power of assimilating the Asiatic peoples and tribes subject to her. A well-known Hungarian authority on Central Asian affairs, Vamberi, says:—"The contrast between the English and the natives in India begins in the cradle and ends in the grave." The Englishman's character possesses a great many elements of strength, but is not the one best adapted for dealing with Asiatics. The Englishman is proud, self-confident, and little able to attract sympathy. As he chiefly follows his own personal interests, he has always proved himself incapable of living on brotherly terms with races of a different or lower culture. The people of India accuse the Government of having done little for the country, of having overburdened them with taxes, of neglect to take measures against the periodically recurring famines (which kill off millions),[1] and, lastly, of its haughty treatment of the natives, to whom it grants neither self-government, nor high official positions, in spite of the fact that many of them are no whit inferior to Englishmen in ability or education. In consequence of all this, they look upon the English rule in India as a foreign domination which can only be maintained by the sword. On the other hand, Russia's prestige in the East is great. Vamberi says that respect for her is so high in Asia that the people are fully convinced of the ultimate subjugation of the whole world by her. For some unexplained reason, the people of India secretly look forward to that which they consider inevitable—their ultimate deliverance by Russia from the British yoke.

In 1878, the English authorities feared a rising in India. Had such really taken place, it is easily conceivable that the appearance of Russian

[1] The writer entirely ignores the magnificent success of our famine organisation in 1897, when thousands of lives were saved by the benevolent action of the Government of India.—TRANSLATOR.

troops on the frontier would have caused a spread of the disturbance all over the peninsula.

The possibility of a rising *en masse* is proved by the state of affairs at the time of the Afghan War. When General Roberts started on his march from Kabul to Kandahar to save the English force which had suffered a defeat at Khusk-i-Nakhud, and General Stewart retired from Kabul, the Indian Mahomedans prepared to make a general protest against the hated English yoke. Roberts's victories, however, restored England's prestige, and prevented a rising. That which was possible twenty years ago will be possible in the future, more so, in fact, because each year sees a smoothing over of caste prejudices, and a growing tendency on the part of all Indians to recognise that they belong to one and the same country. This sentiment is giving birth to a feeling of patriotism.

The land forces of British India consist of:—

a. European troops.
b. Native troops, regular and local.
c. Troops of native rulers—Imperial Service and private.
d. Volunteers.

All these British-Indian forces, with the exception of those in the private employ of native rulers, are divided into four separate armies: Punjab, Bengal, Madras, and Bombay.

The Secretary of State for India—a member of the English Cabinet—is responsible for all matters concerning the defence and armed forces of India. The supreme command over the latter is vested in the Governor-General in Council. All dispositions of the Governor-General in Council concerning the Army are put into force, administratively, by the Military Member of Council, through the Military Department, *i.e.*, by the War Ministry of India, and executively, by the Commander-in-Chief in India, through the Head Quarter Staff.

The largest tactical and administrative units are a battalion of infantry, a regiment of cavalry, a battery or company of artillery, and a company of engineers. For purposes of peace training, units of one or more arms are assembled in camps, and temporarily brigaded or placed in divisions together. In time of war, brigades, divisions, and army corps are formed.

In the Indo-British Army the proportion of English to all native soldiers is 1 to 3. The following table gives the strength by arms of this Army.[1]

[1] Indian Military Budget Estimates, 1892-93. Quoted in "Review of British Monarchy."

		Battalions.	Squadrons.	Batteries and Garrison Companies.	Guns.	Engineer Companies.	Officers.		Rank and File.		Total.
							English.	Native.	English.	Native.	
Infantry ...	British	53	—	—	—	—	1,537	—	52,177	—	53,714
	Native	134	—	—	—	—	1,177	2,161	—	116,229	119,567
Cavalry ...	British	—	36	—	—	—	261	—	5,418	—	5,679
	Native	—	161	—	—	—	398	682	—	24,587	25,667
Artillery ...	British	—	—	88	390	—	440	—	12,770	2,233	15,443
	Native	—	—	13	72	—	41	34	—	2,507	2,582
Engineers ...	British	—	—	—	—	—	293	—	—	—	293
	Native	—	—	—	—	22	56	63	85	3,621	3,825
Grand Total ...		187	197	101	462	22	4,203	2,940	70,450	149,177	226,770

The English troops are part of the Regular Standing Army, sent to India for a certain period. The yearly waste in these troops is made good by the despatch from England of drafts, which number about 12,000 men a year for all arms of the Service. Casualties among the English troops in war would be replaced by the Army in England, with its Army and Militia Reserve. The English have no reserve in India.

The native troops are composed of men who voluntarily enlist for service under the British flag.

To ensure the fidelity of the native troops, a mixture of men has been resorted to, in which full advantage is taken of their differences in politics, nationality, religion, and customs. The following methods of mixture will explain our meaning :—

a. The regimental system, where all the companies are composed of men of one tribe or caste.

b. The company system, where each company is composed of men of one tribe or caste.

c. The completely mixed system, where each company is composed of men of various tribes or castes.

The last two systems hinder the cultivation in units of that indispensable feeling of unity and mutual support, without which successful

action in war is impossible. Recognising this, the Government is striving to adopt the class regimental system, but the fear of a rising stands in the way of a thorough reform.

Out of the rank and file of the native troops the English have created, as it were, a special warlike caste, which is intended to serve as a support to their power. The Government safeguards the native soldiers from the influence of the people, and quarters them in special military towns, where they are completely separated from the rest of the population. The same object is responsible for the division of the forces into separate armies, each of which has its own *rayon* for quartering, so as to prevent union between the native parts of the various armies.

The English officers in the Native Army are of excellent quality; they occupy the higher posts, the native officers filling those of company or half-squadron commanders.

The ranks of the native officers are filled by the promotion of suitable non-commissioned officers, who can successfully pass an examination in the regimental school. The education and scientific military preparation of such officers is limited, in the majority of cases, to a knowledge of reading and writing.[1]

With the object of having a trained complement of men in case of war, a so-called Active Reserve has been formed. To avoid an accumulation of dangerous elements among the people, however, each unit is allowed only a fixed number of Reservists, approximately 160 to 218 men to each battalion.[2] This Reserve numbered 9,904 men at the beginning of 1887.

The most striking characteristic of the Anglo-Indian Army is the non-combatant element, which is very numerous both in the native and English forces. These non-combatant people, called followers, do all the menial and transport work; they do not belong to the Army, but are engaged and dismissed in greater or lesser numbers according to requirement. The number of followers has been considerably reduced, but it still exceeds the combatant portion of an Army. During the mobilisation preparations in 1885, it was considered necessary to have 58,000 followers for an Army of 56,000 men. In reality, it is very probable that a great many more would have been required. When we take into consideration the fact that any forward operations by the English will have to be carried out over mountain regions and deserts, it is evident that this enormous number of followers, entailing an equally enormous increase in the transport required for food, will be the chief factor which will paralyse any active operations of the Anglo-Indian forces, especially at a distance from their base.

The troops of the vassal princes, as has already been said, consist of their own and of Imperial Service forces. The latter, commanded by

[1] The writer is, apparently, unaware that many native gentlemen obtain direct commissions without any previous service in the ranks. This is specially the case in the Native Cavalry.—TRANSLATOR.

[2] The Active Reserve of the Native Army, Madras and Bombay excepted, has been raised from 218 to 280 men per battalion.—TRANSLATOR.

native officers, have to be completely organised in peace. At present they consist of the following:—15 battalions of infantry, 52½ squadrons, and 2 mountain batteries; a total of 18,500 men. Their instruction is supervised by English officers, but owing to the small number of the latter, it cannot be said to be satisfactory. Moreover, being under their own chiefs in peace-time, and being by no means trained in a spirit of sympathy for the English, it is not likely that England can give them a place in Imperial defence.[1]

The private Armies of the Indian princes consist of regular—so-called re-organised troops—and of irregular levies.

The re-organised troops are taught by English instructors. They are not under the Anglo-Indian Government, and can only be used for Imperial service by special agreement between the British Government and the native princes. These troops number not more than 21,000 men, are comparatively well armed and taught, and are distinguished for their fidelity to their own rulers. There is no doubt that the Government would not use them for the defence of the interests of the English crown.[2]

The irregular troops of the native princes exist on paper only. By organisation they are of the character of feudal levies, possession of the soil being held to entail military liability. The returns put them at 325,000 men, with 2,698 guns. In the most favourable circumstances, one-third of these might be called out for service. The artillery is absolutely useless. If called out, these men would form a badly-armed and undisciplined mob, and would be of little service to the English.

The existence of the above forces is one of the reasons why the English will not move their garrisons in the interior of the country in case of war.

Besides these, there are the Volunteers, whose duty it is to defend the English settlements and railways in case of an advance of the Regulars to the theatre of war. The Volunteers are composed solely of Englishmen and Europeans living in India. They consist of infantry, mounted infantry, cavalry, artillery, and engineer corps. In 1892 they numbered 26,000 men, of whom 20,000 were efficient.

Now that we have reviewed the armed forces of India, let us consider the question: how will these forces be used for the maintenance of internal order, and for the repulse of external aggression?

In anticipation of an invasion, the armed forces of India are to be divided into two armies—field and garrison. The latter, according to English calculations, could not be less than 150,000. Consequently, 75,000 Regulars remain to form the field army. The 150,000 soldiers to whom will be entrusted the maintenance of order in a country peopled by 288,000,000 souls, represent a very insignificant force in comparison with

[1] The writer's estimate of the value of Imperial Service troops is not a correct one. They are now, in most cases, extremely efficient, more especially the cavalry, and transport trains, which rendered most efficient aid in the Chitral and Tirah campaigns.—TRANSLATOR.

[2] On the contrary. The best place for them would be in the forefront of the battle.—TRANSLATOR.

the mass of the inhabitants, *i.e.*, one native or English soldier to every 2,000 inhabitants, or one English soldier to 6,000 natives.[1] It, therefore, follows that even a moderately energetic general rising would result in the annihilation of this force. Colonel Tizengowzen says in his "Sketch of the British Monarchy" that, for the protection of the North-West Frontier, the English Head Quarter Staff would like to concentrate 80,000 men on the line Pishin-Kandahar-Girishk; 50,000 men on the line Peshawar-Kabul; 5,000 men to maintain communication between the above forces on the line Dera-Ismail-Khan-Ghazni; and 25,000 men as line of communication troops. All these together would constitute a field army of 160,000 men. The question immediately suggests itself: of what troops is this army to be formed? The weakness of their offensive and defensive forces obliged the English to raise the above-mentioned Volunteers, who, if included in the strength of the defensive army, might set free 26,000 Regulars from the latter to serve with the field army. In addition to this, 35,000 to 40,000 men of the Imperial Service, and re-organised native States', troops might be included in the field army. Even then, the Anglo-Indian forces would not be equal to the demands made upon them in case of war. Moreover, the composition of the field army would not be particularly good. There would only be 35,000 English troops, and, of the natives, 35,000 to 40,000 would be auxiliaries.

In case of emergency, however, the armed strength of British India can be increased by the despatch of reinforcements from England, *e.g.*, for the protection of English Colonial possessions, the following force is held in constant readiness to embark from England:—10 battalions of infantry, 4 regiments of cavalry, 6 batteries of field artillery, 3 engineer, and 7 A.S.C., companies; 21,000 men in all.

If it were necessary to send a large force abroad, the above expeditionary troops could be increased to two army corps, with a cavalry division, and departmental services—a force of 54 battalions of infantry, 9 cavalry regiments, 33 batteries (198 guns), and 11 engineer companies, with a total strength of 89,300 men.[2]

It is considered that it would only be possible to transport this force in two journeys. The 1st Army Corps, with cavalry division and train, would be the first to mobilise. The 2nd Army Corps would follow.

The troops first for mobilisation are maintained at a higher strength than the remainder. After embarking these two army corps, there would remain in the United Kingdom 95,000 Regulars of the Standing Army. These could be increased by 30,000 men from the Militia Reserve.[3]

We have no accurate details with reference to the speed of mobilisation

[1] In comparing the numerical weakness of the troops left in India (in case of war) with the population they would have to keep in order, the writer overlooks the fact that, except in native States, natives are not allowed to bear arms, except to a very limited extent, and only then on satisfying the civil authorities as to their good character, and paying a heavy license.—TRANSLATOR.

[2] *Voïénnyi Sbórnik*, Nedzvietski.

[3] "Review of the British Monarchy," Tizengauzen.

of the Anglo-Indian Army, but we will bring forward a few facts throwing light on the subject.

In the *Pioneer Mail* of 4th April, 1895, we see some particulars of the mobilisation of the Bajaur Division, which took part in the Chitral campaign. As this mobilisation was carried out in accordance with the Indian mobilisation arrangements, we may take it as an example of what a single division can do. It took 18 days.

(*To be continued.*)

SHARPSHOOTERS.

By Major HUGH W. PEARSE, 2nd Bn. East Surrey Regiment.

THE writer will begin some brief remarks on the subject of scouting and the individual action of picked marksmen, by frankly stating that he holds the view that special duties are best entrusted to specially selected men. There is no doubt that this opinion will be regarded as a heresy by many of the military official class. It has been the habit among these authorities to hold the view that the retention or creation of specialists in the military profession is a mistake; in proof of which statement may be instanced the comparatively recent conversion of company officers into paymasters, drill instructors, and musketry instructors, and, in the lower ranks, the more remote abolition of the special flank companies which in days of old performed all the skirmishing duties of a battalion in action.

The object of this general abolition of specialists in the Army is no doubt a good one: that of the levelling up of the mass to the pitch of training formerly exacted from a small number only; yet the writer would suggest the consideration that the bulk of any body politic may be levelled up to the utmost, and the higher the better, and yet that there must remain certain levels of accomplishment which can only be attained by men possessed of special qualifications and favoured by a more exact training than can be bestowed on large numbers.

Again, we should remember that to be a soldier is to follow a profession, and that in all professions there are specialists—men who by superior talent and education have outstripped their fellows, and who, by their superior acquirements can attain results quite beyond the reach of the rank and file of their calling. These specialists, it may be added, not only possess exceptional skill, but attain exceptional rewards. The successful doctor, lawyer, or preacher does not by more surpass in worldly success the bulk of his rivals than, in a lower walk of life, does the skilled mechanic surpass in wage-earning capacity the mere journeyman.

Even in the Navy there are far more gradations of pay and rank than in the Army, in which calling alone professional skill, *per se*, is of no avail to enable a man to rise. The fully developed man, the skilled shot, the accomplished scout and skirmisher, does not command by his professional perfection one penny more pay than the puny lad who has just been dismissed drill, and has managed to scrape through his recruits' course of musketry.

The object of the following brief paper is to suggest for consideration the desirability of affording soldiers who show a natural aptitude for special duties, a special training and some trifling encouragement for submitting to that training; and also to show what valuable results would, in the belief of the writer, accrue from the institution of a body of specially trained scouts and sharpshooters in every battalion of infantry.

Most persons who have witnessed peace manœuvres will probably admit that scouting is the most difficult duty that the infantry soldier is

called upon to perform, and a duty, moreover, that practical experience alone enables a man to learn. No amount of lecturing, questioning, or reminding will give a young soldier the faintest idea of how to see without being seen, to be bold without being rash, to make use of ground, to observe all that he should observe, and to put the result of his observation into an intelligible form; in a word, to be of any use as a scout. Special practical training, in fact, is absolutely necessary, and is very properly given to the young soldier by his captain in the annual field training of his company. It is, however, a fact well known to all officers who have conducted the said field training of a company, that the time available for instruction in scouting is so limited, and the number of young soldiers so large, that a few soldiers only, and those few, men who have shown a natural aptitude for the work, can be well instructed in each company. Thus has come about the common adoption of a partially recognised system of entrusting the scouting duties of a company to a few selected men.

The writer would suggest that this practice of selecting men as scouts should be made universal, and that the value of the scouts should be largely increased by the special training bestowed on them being conferred on men picked for skill in shooting, as well as for their aptitude in scouting, who could then, with great advantage, combine the duties of scouts and sharpshooters. They could be made yet more valuable by a brief course of instruction in semaphore signalling, which would enable them to transmit information to the troops covered by them, without being compelled to expose their position and diminish their numbers by sending back messengers.

Leaving for a moment the subject of scouting, the writer next desires to point out how important it is, as it appears to him, that a certain number of men in each battalion should be specially trained as "sharpshooters." This is an obsolete term, but its meaning is well understood, and it will be observed that the same special qualities and training being required for the duty of sharpshooter as for that of scout, the men selected for the latter duty could and would perform the former also.

Two special and equally important duties are proposed for the sharpshooters:—1. Action against infantry. 2. Action against artillery.

With regard to the latter duty, a few explanatory remarks may be necessary, as but little attention has of late been given to the action of skirmishers, or of individual marksmen, against guns; an omission which is the more curious when we recall the very decisive effect of the fire of the Boer marksmen against Sir George Colley's guns at the action of the Ingogo River, in 1881. On that occasion, one of the two artillery officers with the guns was killed and the other wounded, while nearly all the gunners, and the infantry soldiers who took their place, were successively killed or disabled, until the guns were finally put out of action. It is very doubtful if the guns, gallantly as they were fought, inflicted any loss on the Boers, so difficult is the mark presented to artillery by a scattered line of marksmen.

The efficiency in action of a battery, or of many batteries, depends almost entirely on the battery commander or commanders. On this point artillery officers are agreed. The battery commander selects the position for his battery ; he conducts the ranging operations, and he alone controls the fire of his guns. It would then be the primary duty of infantry opposed to artillery to prevent, firstly, the battery commander, and, secondly, any superior officers of artillery, from carrying out their duties in action. This object can be attained only by the bold and thorough use of sharpshooters, who must be superior in marksmanship, in determination, and in skill in the use of ground to the escort of the guns. In the early battles of the next war in which civilised armies are engaged, the writer believes that great advantage will fall to the side which pushes forward clouds of carefully trained sharpshooters with definite orders to get, at all costs, within aimed-fire distance of the hostile artillery, and to shoot officers, gunners, and gun teams. That such action would eventually be met by an increase of strength of the infantry escorts is obvious, but in war much is to be gained by the first use of novel tactics. It will be seen that sharpshooters, working skilfully, under all available cover, from various points of the compass, and bringing a converging fire on batteries in action, or coming into action, would afford no target at which artillery could afford to fire.

The sharpshooters of a large force, the proposed numbers, training, and organisation of whom will follow, would, in the writer's belief, be numerous enough, having regard to their efficiency, to disorganise the enemy's infantry as well as his artillery. To pick off officers is opposed to the old chivalrous rules of war, but the statistics of every campaign since the introduction of arms of precision show that such is the regular practice of all Armies. This being the case, our soldiers must be prepared to treat their enemies as the latter will most certainly treat them.

As for the number of sharpshooters who should be trained in each regiment, and the mode of education which should be adopted for them, the writer does not venture to lay down any rules of his own devising; all that he desires is to lead those in authority, and particularly those in command of infantry battalions, to give the matter their consideration. Some remarks on the subject, written by an acknowledged expert on musketry training, and a practical soldier of very wide experience, seem to him to put the matter very convincingly. With permission of the author they are here transcribed :—

"1. A special course of instruction (is suggested) for a small proportion of *marksmen* who fulfil certain further conditions as regards intelligence and activity. The numbers so selected should be limited to one N.C.O. and six men per company. They should wear a distinguishing badge, and their special instructions should consist of an extra course of practical musketry and judging distance; in being taken out and trained in very small units to work over mountains, through forests, and across every description of bad and broken ground; in running; climbing; stalking one another, and generally in endeavours to work as far as possible up to the ideal of a Highland gillie. . . . .

"If forty or fifty scouts, trained up to this standard, *i.e.*, that of a Highland gillie or sporting subaltern, succeeded in getting into touch with a Continental battalion which was retreating through hilly, broken, or enclosed country, they would either bring the enemy to an absolute standstill, or else decimate his ranks in a very short period and with but trifling loss to themselves."

Having considered these weighty remarks with regard to the employment of specially selected and highly trained sharpshooters by ourselves, we should also remember the absolute necessity of providing against attack by means of sharpshooters on the part of our enemies. How deadly such attacks may be have been proved to the hilt by our experiences in the short and disastrous Boer campaign of 1881, and, more recently, in Chitral and Tirah. In the last-named campaign our losses from the aimed fire of marksmen posted in ground familiar to themselves and strange to their opponents were terribly heavy—out of all proportion to the loss incurred by the Afridis themselves. It was not until we employed a large number of Gurkha scouts, inferior probably as marksmen to their enemy, but superior in pluck and discipline, that the tide turned.

The organisation of sharpshooters suggested for every battalion of infantry is as follows:—

Subalterns - - - - - - - - -	2
One non-commissioned officer per company - -	8
Six sharpshooters - - - - - - -	48
Total - - - - - - -	58

It is considered that a body of this strength could perform all the duties in the field that bring men into close contact with the enemy during operations by day, the time when skill in shooting most avails. The sharpshooters of each company would perform all scouting duties whenever the company was acting independently. When the battalion was employed on any special duty, such as that of a battalion in the first line of a force in attack, flank guard to a large force, escort to guns, the execution of a turning movement, etc., the sharpshooters would form the screen of scouts, or the "point" of advance or flank guards, and they would perform the duties of patrol leaders. In fact, all the field duties which require special training, superior intelligence, personal activity, self-reliance, and skill in shooting, would be performed by them. That such soldiers would deserve and should receive a special rate of pay seems obvious.

In days of yore the British soldier, in spite of inferior armament, proved his superiority in war, both in the mountains and in the plains, over the most warlike races of the earth. The same qualities that gave him that superiority still exist. All that is required is the intelligent cultivation of his powers, and the encouragement of individual skill. The writer trusts that some who will read this paper will hold with him that the institution in all infantry battalions of a body of sharpshooters, on the lines indicated, will not be without a salutary influence on our military efficiency.

NAVAL NOTES.

HOME.—The following are the principal appointments which have been made: Captains—W. G. White, Hon. H. Tyrwhitt, C. H. Coke, for transport duties at Southampton, Liverpool, and Thames District, respectively; G. S. Warrender to "Barfleur"; J. Startin to "Arethusa"; E. S. Poë, M.V.O., to "St. George"; F. O. Pike to "Minerva"; G. H. Cherry to "Juno"; R. K. McAlpine to "Cambrian"; F. W. Fisher to "Collingwood"; H. C. Bigge to "Sans Pareil." Commanders—Hon. H. L. Hood, G. M. Cradock for transport duties at Liverpool and the Thames Districts, respectively; F. Luscombe for transport duties in Natal; E. F. Gaunt for service at Lui-Kung-Tao; M. S. Beatty to "Racer"; T. Napier to "Crane"; M. Singer to "Flying Fish"; W. G. Van Ingen to "Edinburgh"; F. M. Walker to "Boscawen."

The four ships forming the Training Squadron have been paid off all standing, and the officers and men have been transferred to the first-class cruiser "St. George" and the second-class cruisers "Minerva," "Juno," and "Cambrian"; Commodore Poë has hoisted his broad pennant in command on board the "St. George," and the squadron has assembled at Portland to await orders. The third-class cruiser "Barham" commissioned at Portsmouth on the 3rd ult. for the Mediterranean, and left on the 14th ult. for her destination. The second-class cruiser "Hermes" commissioned at Devonport on the 5th ult. for the North American station, and left on the 22nd ult. for Bermuda, but she has since been ordered to proceed to Las Palmas in connection with the transport of troops to the Cape; the first-class cruisers "Diadem" and "Niobe" were detached from the Channel Squadron on the 15th ult. also for special duty in connection with the transport of the army corps to the Cape; the second-class cruiser "Thetis" being further ordered from the Mediterranean to the same station. The first-class cruiser "Grafton" from China, paid off at Chatham on the 4th ult. The third-class cruiser "Royalist" arrived at Plymouth on the 17th ult. and will pay off at that port.

Launch.—The new first-class battle-ship "Bulwark" was launched at Devonport on the 18th ult. Her principal dimensions are as follows:—Length between perpendiculars, 400 feet; extreme beam, 75 feet; draught of water, forward 26 feet 3 inches, aft 27 feet 3 inches; load displacement, 15,000 tons. She will be fitted with two complete sets of engines of the vertical triple-expansion type, of 15,000-I.H.P., and is expected to attain a speed of 18 knots. The engines, which are being made by Messrs. Hawthorn, Leslie & Co., of Newcastle-on-Tyne, have cylinders of 31½ inches, 51½ inches, and 84 inches diameter, and a stroke of 51 inches. Each set, built in a separate room, is to be capable of developing 7,500-H.P. with 108 revolutions per minute. There will be 20 boilers of the Belleville type. The armament will comprise four 12-inch B.L. guns, worked in two barbettes, twelve 6-inch Q.F. guns in casemates, sixteen 12-pounder 12-cwt. Q.F. guns, six 3-pounder Hotchkiss Q.F. guns, one 12-pounder 8-cwt. boat gun, one 12-pounder 8-cwt. field gun, and eight ·45-inch Maxim guns. She will also have four submerged torpedo-tubes. When commissioned the vessel will have a total of 773 officers and men. The "Bulwark" and her sister ships are identical in form, dimensions, and displacement with the "Formidable" class, but differ slightly in the distribution of armour protection. In the "Venerable" class the belt of side armour is carried much nearer the bow than in the "Formidable" class, while the fore armoured bulkhead, which is a feature in the "Formidable" class, has been dispensed with.

Steam Trials.—The new first-class battle-ship "Ocean" has been completing her trials. At the thirty hours' trial at four-fifths power, the mean results were:—Steam in boilers, 264 lbs.; steam in engines, 220 lbs.; vacuum, starboard 27 inches, port 26·6 inches; revolutions, starboard 98·5, port 98·4; I.H.P., starboard 5,223, port 5,080—total, 10,303; speed by patent log, 15·5 knots. The engines worked smoothly, but the speed was less than was anticipated as the ship's bottom was very foul. Before her full-speed trial the ship was docked and the results of the eight hours' run at full-speed, which was carried out afterwards, were highly satisfactory, as follows:—Steam, in boilers 272 lbs.; at engines 234 lbs.; vacuum, starboard 27 inches, port 27 inches, revolutions, starboard 112, port 114; I.H.P., starboard 6,910, port 6,918—total, 13,828; speed, 18·5 knots; coal consumed per I.P.H. per hour, 1·7 lbs.

The new first-class battle-ship "Goliath" has been continuing her trials, the results of the thirty hours' run at four-fifths of her full power being as follows:—Steam in boilers, 273 lbs.; vacuum, starboard 26 inches, port 26·5 inches; revolutions, starboard 99·5, port 101; I.H.P., starboard 5,160, port 5,253—total, 10,413; speed by log 17·3 knots.

The third-class cruiser "Bellona," which has had a complete refit at Portsmouth, has had a seven hours' full-power natural-draught trial and made a speed of 18·8 knots with 4,250-I.H.P. The vessel has been fitted with Thornycroft water-tube boilers.

The official full-power trial of the new destroyer "Cynthia," built by Messrs. Thornycroft & Co., Chiswick, took place in the North Sea with successful results. Designed to steam 30 knots with the forced draught, the "Cynthia" averaged 30·30 knots on a three hours' run. The engines registered 5,500-I.H.P., or 100 in excess of the estimate.

The new torpedo-boat destroyer "Kestrel" has completed her ten hours' coal-consumption trial satisfactorily. With 530-I.H.P., the engines worked up to 165 revolutions, giving a speed of 13·5 knots, the coal consumption being 2·3 lbs. per unit of H.P. per hour.

The China Squadron Regatta.—This regatta was held at Hakodate on 7th and 8th August, the "Victorious" carrying off no fewer than sixteen prizes, the "Barfleur" five (two of which were won by officers), "Whiting" three "Undaunted" and "Hermione" two each, "Aurora," "Centurion," "Iphigenia," and "Alacrity" one each. The crew of the "Victorious" lost the Chefoo Cup owing to an oar fouling the mark buoy; at the same time the vessel's cutter was the first boat at the winning post. This cup was given last year by the inhabitants and visitors of Chefoo, and the "Victorious" then carried it off easily. The copper punt was a great success, being a model of the ship, devised to work during evolutions; the "Undaunted" came second with a model of her ship, and the "Barfleur" third, with a model of a steam pleasure-boat. The smaller Chefoo Cup was won by the destroyer "Whiting." Results:—

First Day.

Twenty-seven-foot whalers—1, "Victorious"; 2, "Aurora"; 3, "Undaunted."
Smaller gigs and whalers—1, "Whiting"; 2, "Fame."
Twelve-oared cutters—1, "Victorious"; 2, "Undaunted"; 3, "Aurora."
Ten-oared cutters—1, "Barfleur"; 2, "Alacrity."
Pinnaces—1, "Victorious"; 2, "Aurora"; 3, "Undaunted."
Four and five-oared gigs and whalers—1, "Victorious"; 2, "Alacrity" 3, "Iphigenia."
Twelve-oared cutters—1, "Victorious"; 2, "Centurion"; 3, "Barfleur."
Ten-oared cutters—1, "Victorious"; 2, "Centurion"; 3, "Barfleur."
Sixteen-foot service dinghies, oars and sculls, to be pulled in service positions—1, "Victorious"; 2, "Hermione."

Four and five-oared gigs and whalers—1, "Victorious"; 2, "Hermione"; 3, "Barfleur."
Five and six-oared gigs and whalers—1, "Barfleur"; 2, "Hermione"; 3, "Victorious."
Twelve-oared cutters—1, "Undaunted"; 2, "Hermione."
Ten-oared cutters—1, "Barfleur"; 2, "Alacrity."
Six-oared gigs—1, "Hermione"; 2, "Centurion"; 3, "Barfleur."
Four and five-oared gigs and whalers—1, "Victorious"; 2, "Barfleur"; 3, "Hermione."
Berthon boats—1 and 2, "Whiting."
Twelve oared cutters, obstacle—1, "Centurion"; 2 and 3, "Barfleur."
Ten-oared cutters, obstacle—1, "Hermione"; 2, "Iphigenia"; 3, "Barfleur."

Second Day.

Four and five-oared gigs and whalers—1, "Victorious"; 2, "Barfleur."
Twelve and fourteen-oared cutters—1, "Victorious"; 2, "Undaunted"; 3, "Centurion."
Five and six-oared gigs and whalers—1, "Victorious"; 2, "Barfleur."
Ten-oared cutters—1, "Iphigenia"; 2, "Hermione."
Four and five-oared gigs and whalers—1, "Victorious"; 2, "Barfleur"; 3, "Hermione."
Twelve-oared cutters—1, "Victorious"; 2, "Undaunted"; 3, "Aurora."
Five and six-oared gigs and whalers—1, "Aurora"; 2, "Brisk"; 3, "Barfleur."
Five and six-oared gigs and whalers—1, "Victorious"; 2, "Centurion."
Ten-oared cutters—1, "Alacrity"; 2, "Barfleur."
Launches—1, "Undaunted"; 2, "Aurora"; 3, "Victorious."
Twenty-seven-foot whalers—1, "Victorious"; 2, "Iphigenia"; 3, "Centurion."
Smaller gigs and whalers—1, "Whiting"; 2, "Fame."
Skiffs—1, "Barfleur"; 2, "Alacrity"; 3, "Aurora."
Judging prize for copper punts—1, "Victorious"; 2, "Undaunted."
All comers—1, "Barfleur"; 2, "Alacrity"; 3, "Victorious."

—*Times* and *Naval and Military Record.*

The Value of the Matériel of the Navy.—The *matérial* of the Navy is estimated at the colossal sum of £128,000,000 by a writer in *Cassier's Magazine*, who has made an exhaustive research into the monetary value of this branch of the Service. At the commencement of the century the British fleet was worth about ten millions sterling—in other words, its entire value was very little in excess of what is now spent in one year in new construction. Basing his estimate on the actual cost of vessels on the effective list, the writer of the article arrives at the following result :—

Number.	Description.	Cost.
64	Battle-ships	£52,000,000
15	Coast-defence vessels	3,100,000
22	Armoured cruisers	11,327,000
119	Protected cruisers	29,037,000
16	Unprotected cruisers	2,236,000
35	Torpedo-vessels	2,300,000
120	Torpedo-boat destroyers	6,000,000
98	Torpedo-boats	2,000,000
489	——	£108,000,000

In order, however, to bring the estimate up to date, allowance is made for constructive work now in hand, and fixing this at £20,000,000, which is certainly not outside the mark, the grand aggregate of £128,000,000 is reached. This result is not arrived at by a fanciful reckoning, but by the nearest approximation to actual expenditure. The sum represents an asset from which the taxpayer obtains a good return in the protection of commerce and a bulwark of national defence.

A New Instrument for Rapidly Measuring the Distance of Ships and Objects at Sea of known height; designed by Commander J. F. Stuart, R.N. (*Stuart Distance-Meter*).—Most naval officers will admit that in order to perform fleet manœuvres under steam with accuracy, it is desirable that the captain of each ship should at any moment know the distance of the leading ships of divisions or sub-divisions, and that of his next ahead or abreast. In practice he is generally dependent on one of his officers, usually the officer of the watch, whose whole time is absorbed to the exclusion of his other duties in keeping the captain informed as to the distance of the ships in question.

This officer must keep in his hand during the whole time of the evolutions, a sextant, weighing generally over 3 lbs., a delicate and expensive instrument, which will, to say the least of it, not be improved by this work.

Whenever the captain wants to know the distance of a certain vessel this officer must first take a masthead angle, he must read it off with a microscope, he must apply his index error, and after that he must go (often to some little distance from the place where he has taken his observation) to look at the angle board.

This board may have been removed from the place where he last saw it by some well-intentioned person, or be hidden by having a signal or other book placed on top of it; he must then find on the board the height of the masthead of the ship in question, and if the table of masthead angles is not on the same board as that giving the heights of mastheads of the fleet, a new search may have to be made for it.

He will then very often find that the height of the masthead of the ship in question does not agree exactly with the heights for which the angles have been calculated, and must in this case interpolate between two columns of angles to find the nearest angle to that he has measured; and he is a fortunate man if he is able at sight to interpolate between two sets of angles made up both of degrees and minutes.

When he has done this he will probably find that the angle he has observed does not agree exactly with any of the given distances, when another calculation is necessary to find the exact distance due to the angle. This distance may come out so nearly between the quarter cables on each side of it that he cannot tell which is the nearer without some further mental calculation.

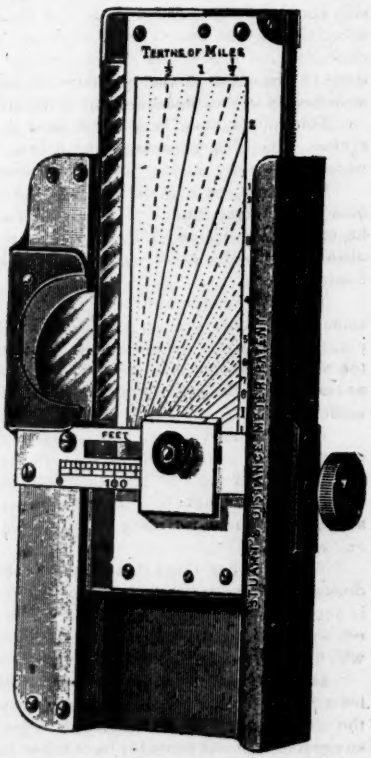
In performing these several operations he is liable to make as many mistakes, his anxiety to give the distance quickly not decreasing this liability; and, even if the angle board is well in sight (when he will not have lost time as above suggested), he will probably have taken half a minute or so to get the distance, by which time the distance may have altered appreciably.

Stuart's distance-meter is designed to obviate all these chances of error, and make the captain or officer directing the manœuvres independent of anybody else for ascertaining his distance. From the illustration it will be seen that the instrument consists of a fixed lens and a sliding one, to which a scale giving the distance is attached. This latter lens is worked up and down by a rack and pinion. A crosspiece carries a scale of heights of objects. The slides on this crosspiece may be set at any of these heights, and carries a mark, which must necessarily rest on the scale of distances. The method of using it is as follows: Set the vertical edge of the slides on crosspiece at the height of the masthead or other object as indicated on the scale, then

by means of the millet pinion-head raise the right-hand lens as high as it will go, and look at the ship or other object, viewing a half of it in each lens; a complete image of it will then be seen. On lowering the movable lens, the right-hand portion of this image will be lowered; this motion is to be continued until the masthead of the ship or the top of the object in the right-hand lens is seen in line with the water-line of the ship or bottom of the object in the left-hand lens.

The number on the diagonal line on which the mark on the bevel edge of the slides rests gives the distance in cables (or tenths of nautical miles), which distance may in most cases be read off to the nearest eighth of a cable.

In the illustration the instrument is showing a distance of eight-tenths of a mile, or eight cables for a height of 150 feet.



The instrument is marked in tenths of a nautical mile, up to one mile, and a distance of three miles can be read off, the dashed lines showing half cables or half miles, and the dotted lines quarters. The crosspiece is marked in feet up to 200 feet; but if the distances of objects whose heights run up to 2,000 feet are required, it is only necessary to consider each foot so marked as 10 feet and the tenths of miles as miles. The instrument in the engraving therefore shows a distance of eight miles for a height of 1,500 feet, so that the distance of mountains lighthouses, or any other objects inside the horizon line may be found.

A telescope which may be readily attached is provided for use if objects are not clearly visible.

The instrument weighs only 10 oz., and can be easily carried in the coat pocket. It does not require to be protected by a case while in the pocket, and will always retain a record of the last distance observed. The angle-board is entirely dispensed with, as also is the table of heights of mastheads, since these heights can be written on the tablet provided at the back of the instrument.

No microscope is used in the reading of the instrument, which reading can be done if necessary at a distance of several feet from the eye.

No interpolation is necessary in reading the distances.

The operations of getting the distance of a ship need not occupy more than a few seconds.

The instrument requires no adjustment and is not liable to get out of order.

Any person capable of reading can learn to use it in a few minutes.

FRANCE.—The following are the principal promotions and appointments which have been made: Capitaines de Vaisseau—L. J. Rivet to Rear-Admiral; E. L. Gadaud to "Gaulois"; M. J. Aubert to "Châteaurenault"; P. T. Meunier to "Triomphante" and command of Naval Division in Cochin-China; J. F. Krantz to "Couronne"; J. M. Nény to "Neptune"; M. De Fauque de Jonquières to "Formidable"; A. J. Bernard to "Amiral-Tréhouart"; L. Borel de Brétizel to be Chief of the Staff to Vice-Admiral Ménard, Commander-in-Chief of the Northern Squadron. Capitaines de Frégate—O. De Geis de Guyon de Pampelonne, J. L. Nény, L. A. Texier to Capitaines de Vaisseau; B. St H. Sourrien to "Infernet"; E. M. Lemogne to "Dunois."—*Le Journal Officiel de la République Française.*

General—Vice-Admiral Ménard hoisted his flag on the 21st ult. at Brest on board the first-class battle-ship "Formidable," and has taken over the command of the Squadron of the North, which has been temporarily reconstituted as follows:—

First Division—

First-class battle-ships—"Formidable" (flag-ship of Commander-in-Chief), "Charlemagne," "Gaulois."

Second Division—

First-class battle-ships—"Amiral-Duperré" (flag-ship of Rear-Admiral Touchard), "Amiral-Baudin."

Second-class battle-ship—"Redoutable."

The first-class armoured cruisers "Dupuy-de-Lôme" and "Bruix" are attached to the First and Second Divisions of the squadron respectively.

According to the Naval Estimates for next year, some further alterations in the composition of both the Mediterranean and Channel Squadrons are contemplated. The "Charlemagne," "Gaulois," and "St. Louis" will proceed, as originally intended, to the Mediterranean, where they will constitute the First Division of the Active Squadron, the second being formed of the "Jauréguiberry," "Charles-Martel," and "Bouvet"; as all these six ships have a speed of 18 knots, France will have, for the first time for many years, a fairly homogeneous squadron as her first fighting line in the Mediterranean. The three first-class battle-ships "Masséna," "Brennus," and "Carnot" will then be transferred to the Channel, the "Masséna" taking the place of the "Formidable" as the flag-ship of the commander-in-chief, and the "Brennus" hoisting the flag of the rear-admiral second in command, instead of the "Amiral-Duperré," which ship will be paid off into the Reserve to undergo thorough repairs and receive new boilers. It is intended also that the new first-class cruiser "Guichen" shall take the place of the second-class cruiser "Catinat" in the squadron. Her sister

ship, the "Châteaurenault," to be attached to the Mediterranean Fleet, was commissioned at Toulon on the 16th ult., with a reduced complement, for her trials, before being taken over from the constructors.

Vice-Admiral Godin, who, as a rear-admiral, has lately been in command of the three battle-ships "Magenta," "Neptune," and "Marceau," forming the Squadron of Instruction in the Mediterranean, struck his flag on board the first-named ship on the 1st ult., and the squadron has been broken up, all three ships being paid off into the Second Category of the Reserve, to undergo a general repair, receive new boilers, and have iron substituted as far as possible for wood on board; the "Neptune" has been sent to Brest, where the work connected with her will be carried out.

The first-class cruiser "Tage" has been placed in the dockyard hands at Brest for an extensive overhaul and to receive new boilers.

The work on board the first-class battle-ship "Hoche" is being rapidly pushed on; nearly the whole of her huge superstructure has been removed, and outwardly the whole appearance of the ship has been completely changed; she has received her new Belleville boilers, and various important modifications have been introduced into her machinery, which will lead to increased economy of fuel, while all superfluous wood has been removed.

The torpedo-aviso "Fleurus," when her place in the Northern Squadron is taken by the new destroyer "La Hire," is to be stationed at Dunkirk, where she will serve as central ship of the torpedo-boats belonging to the *Défense-Mobile* of that port.

The old battle-ships "Richelieu," "Colbert," "Trident," "Friedland," and the cruiser "Duguesclin" have been placed in a Special Category of the Reserve at Toulon and grouped. They are all quite obsolete, having wooden hulls.

Launches.—The new first-class gun-boat "Zélée" was launched at Rochefort on 18th October. Her dimensions are:—Length, 56·19 metres (183 feet); beam, 8·04 metres (26 feet); displacement, 646 tons; I.H.P., 900; speed, 13 knots. The engines are triple-expansion, horizontal action, working one propeller. Armament:—Two 100-millimetre (3·93-inch) guns, four 65-millimetre (2·5-inch), and four 37-millimetre (1·45-inch), all Q.F. Her complement is 100 men, 6 officers. She is of the same type as the "Décidée."

The submarine boat "Narval" was launched at Cherbourg on 20th October; she was laid down on 1st June, 1898, and her plans are by M. Lebœuf. Her hull is built of steel, she is 34 metres (112 feet) long, and 3·75 metres (12 feet) broad, when at the surface her draught of water is 1·60 metres (5 feet). She can manœuvre in three positions:—1. On the surface. 2. Hull submerged, but dome and funnel exposed. 3. Entirely submerged, funnel being drawn in. The motive power in the first two cases is oil, and in the third electrical accumulators. Her speed at the surface is 12 knots and when submerged 8 knots. The employment of two distinct motors has the advantage of giving a greater radius of action. This is estimated to be on the surface at 12 knots 252 miles, and at 8 knots 624 miles, submerged at 8 knots 25 miles, and at 5 knots 70 miles. She is intended to carry two torpedo-tubes and a complement of 2 officers and 9 men.

Trials.—The new destroyer "La Hire," having had her screws changed, has resumed her trials at Cherbourg, but she even now has fallen short of the contract speed by nearly a knot; with 4,200-I.H.P. she attained a speed of 20·4 knots, and with 7,100-I.H.P. a speed of 22·1 knots; the contract speed was to be 23 knots with 7,000-I.H.P.

Instead of proceeding to Toulon for her steam trials, as had previously been arranged, the new first-class battle-ship "St. Louis," now completing at Lorient, will carry them out at Brest, at which port she is expected to arrive towards the end of December.

The new first-class cruiser (commerce-destroyer) "Châteaurenault" has been turned over to the authorities at Toulon by her builders, the Forges et Chantiers de la Méditerranée, at La Seyne, for her trials, and she was commissioned on the 16th ult., ready to commence them with a reduced complement.

The new third-class cruiser "Infernet," constructed by the Chantiers de la Gironde, at Bordeaux, has arrived at Rochefort, where her trials are to be carried out.

The new torpedo-boats Nos. 236, 237, and 238 have concluded their trials at Lorient; they all slightly exceeded the contract speed of 25 knots.

The submarine boat "Morse," a modified "Gustave Zédé," driven by electrical accumulators, lately had a trial in Cherbourg Harbour. There was a strong breeze and the weather was not favourable, but the trial is reported to have been satisfactory.

New Regulations.—A Ministerial circular recently issued considerably alters the conditions of service afloat of torpedo lieutenants. Instead of being placed on a special embarkation list, they will in future be on the general roster. When embarked, they will, in preference to other officers not qualified, be selected for torpedo duties; but if there is no vacancy for a torpedo lieutenant they will embark for ordinary duties.

Another order creates a new body of artificers, to be called "electrical torpedo-mechanics," who will in future be entrusted with the duty of looking after the electric fittings, dynamos, torpedoes, etc. The *Yacht* points out that great expense, spread over many years, has been incurred in training torpedo-lieutenants, whose special attainments are now to be thrown away, while some time must necessarily elapse before the new mechanics can be trained and be ready to take over their duties.

The number of students to be admitted to the Naval School in 1900 has been fixed at 100. Increased attention in the examination is to be given to physics, chemistry, and languages.

New regulations have also been issued for the training in the Mediterranean of pilot apprentices, who for the future will be placed under the control of the maritime prefect of Toulon. They will be instructed as before in the pilotage of the coasts of France, Corsica, Algeria, and Tunis. The course will last three years. Two torpilleurs-de-haute-mer will be placed at the disposal of the school, and the "Sarrazin" and "Coureur" have been already detailed for this service. Next year there will be two contingents—one of new apprentices, and the other of head-pilots who have received their certificates, but are undergoing a special course in those sections of the coast to which they have been appointed for duty. These men will be chosen by the commandants of the *Défenses-Mobiles* from among those who have displayed special ability and have been noted for advancement, and they will have to pass a special examination at the end of a year's training.

Return of Target Practice of Mediterranean Fleet.—For the first time, the Minister of Marine has issued a return of the target practice of the ships forming the Active Mediterranean Squadron, but, unfortunately, no details are given of the size of the targets or of the speed at which the ships steamed past them. The return states that the practice was carried out from the "large and medium" guns of the squadron, so it may be assumed the small Q.F. guns were not included. The range varied from 2,000 metres (2,187 yards) to 4,500 metres (4,921 yards), and the squadron altogether fired 1,321 rounds at an average speed of one shot in 23 seconds, the number of hits being 600, which gives a percentage of 45.

———	Rounds.	Hits.	Per cent of hits.	Time. Min.
Brennus	65	30	46	31
Masséna	87	19	22	18
Bouvet	99	32	31	35
Charles-Martel	51	28	55	27
Carnot	55	27	49	22
Jauréguiberry	52	32	61	28
Magenta	48	16	33	27
Marceau	95	42	44	33
Neptune	100	42	42	49
Bouvines	47	20	42	23
Jemmapes...	24	5	21	15
Amiral-Tréhouart	51	30	59	27
Valmy	29	8	28	25
Pothuau	64	29	45	13
Latouche-Tréville	40	10	28	21
Chanzy	40	22	55	22
Amiral-Charner	40	15	38	24
D'Assas	58	24	41	17
Cassard	51	37	72	9
Du Chayla	57	35	61	12
Friant	60	41	68	15
Galilée	36	21	58	10
Linois	36	22	61	13
Lavoisier	36	13	36	3
Average	1,321	600	45	23secs

Le Temps and *Le Yacht.*

RUSSIA.—*General.*—Vice-Admiral Alexyeiv, senior flag-officer of the Black Sea Fleet Division, has been appointed to be commander of the troops at Kwang-Tung and the naval forces in the Pacific. This is the territory leased by the Russian Government in the Liao Tung Peninsula; he is assisted by civil and financial commissioners and a diplomatic agent.

In connection with the new Port of Dalny (Far) in the Far East, we learn that the "Kostroma" of the Volunteer Fleet is to take out the staff before the end of the year.

At Port Arthur there is to be a "Pushkin" School, for the establishment of which a sum of 8,000 roubles (£1,280) has been set apart in this year's Estimates, in addition to 700 roubles (£112) produced by the jubilee of the writer.

The gun-vessel "Giliak" on a second trial of her engines proved quite up to contract. Indeed, the H.P. was 179·76 above what was expected, viz., 1,000—port engine, 598·71 with 217 revolutions; starboard, 581·05 with 213.

Models are being prepared for despatch to the forthcoming Paris exhibition representing the "Borodino" of 13,600 tons, the cruiser "Gromoboi" of 12,359 tons, a 3,000-ton cruiser, and a torpedo-boat. A model of an orthodox church in the Balkans will also be exhibited.

A useful work, compiled by the Grand Duke Alexander, "Foreign Navies, and a Book of Naval Information for 1899," has been lately published. In addition to the information relative to fleets, harbours, consuls, etc., to be found in previous issues, we have a very interesting article on scouting and reconnoitring. The opinions quoted are chiefly those of the French so-called Jeune École, and include such writers as Fournier, Viquot, and Montéchant. The information is very detailed and reliable and such as enables deductions to be drawn by the intelligent and enquiring reader. There is a good historical account of the growth of the German Navy, and justice is done to the inventiveness of the French and the inspired self-confidence of the English, while the Japanese skill in

choosing the best that other countries can give is dwelt on, and the curious fact that China has the fastest destroyers, built at Schichau, and the fastest cruiser, built by Armstrong.

It has at last been decided to strike the wrecked second-class battle-ship "Gangut" off the list of ships of the Navy, the Neptune Company having declared its inability to raise her. It is, therefore, proposed to blow her up, and a vessel has been sent to the Island of Biörke for the purpose.

The cruiser "Svietliana," the visit of which to Bear's Island seems to have caused a good many misunderstandings, put in there to assert a long-established right, and one which no one was likely to seriously dispute. What is perhaps of most importance is that she brought away some specimens of coal, which on trial have been pronounced in no way inferior to Cardiff coal, the consumption with a like number of revolutions being the same. This was only surface coal, and it is likely that the lower strata will yield a still better quality.

Two new ships, the coast-defence ironclad "General-Admiral Apraxin" and first-class battle-ship "Peresviet," are joining, respectively, the former the Training Squadron of Admiral Messer at Libau, her commander being Captain von Lindeström, and the latter that of Rear-Admiral Amosov, to test her sea-going qualities, afterwards completing her steam-heating apparatus.

There is some discussion as to the most suitable anchors for use in the Navy. It seems as if the choice lay between the Martin's improved, and Holl's, as supplied by Messrs. Hingley. Until these latter have been further tried, as they are to be, on board the second-class cruiser "Aurora," no more are to be ordered, or made at home. The "Aurora," an armoured-deck cruiser of 6,630 tons, is to be launched next year. The Martin's improved are to be kept in use in other cases, and supplied, in the meantime, to new ships launched.

There is also a question as to the most suitable port for the Training Squadron to anchor in. Hitherto, Trongzund Roads has been the place, but according to the *Viéstnik* the Bay of Rooger Vòk (Baltic Port) has been much used this year, and, although less sheltered, in all other respects it is far superior to the former, especially in accommodation, the absence of reefs and shoals, the facility of entrance day and night, and for obtaining fresh provisions. It is, therefore, more than likely that for the future it will be selected for the harbour training of the squadron in question.

Estimates.—These amount to 87,566,800 roubles (£14,010,677), of which the following items are exceptional:—

	Roubles.	
Increased shipbuilding	6,000,000	(£960,000)
Strengthening of Fleet	16,000,000	(£2,560,000)
Enlargement and improvement of Vladivostok	3,000,000	(£480,000)
Improvement of Port Arthur	3,000,000	(£480,000)
Total	28,090,000	(£4,480,000)
Maintenance of Staff	2,277,321	(£364,379)
Maintenance of educational establishments ...	983,704	£157,392)
Shipbuilding and guns	38,023,351	(£6,083,736)
Ships in commission	14,357,769	(£2,297,243)
Wages for construction and buildings... ...	4,049,522	(£647,923)
Survey and beacons	1,084,279	(£173,484)
Yards and workshops	4,689,245	(£750,279)
Store pay	9,069,136	(£1,451,062)
Gratuities and special service	1,296,846	(£207,495)
Medical branch and hospitals	1,045,294	(£167,247)
Various	1,435,533	(£229,685)
Port Alexander III.	3,200,000	(£512,000)
Sea routes to Obi and Yenisei...	54,700	(£8,752)
Vladivostok	3,000,000	(£480,000)
Port Arthur	3,000,000	(£480,000)
Total	87,566,800	(£14,010,677)

New Ships.—The new first-class battle-ship "Cesarevich," building at the Forges et Chantiers de la Méditerranée, at La Seyne, is of the type of the "Jauréguiberry," and all the steel employed will be Siemens-Martin. Her dimensions will be as follows: — Length, 388 feet 9 inches; beam, 75 fee 6 inches; with a displacement of 12,900 tons. The plates of the upper armoured deck and the communication and ammunition tubes will be of a special quality of steel, employed in the French Navy, the latter 5 inches thick. The battery deck will be covered with linoleum, as will the upper armoured deck, which is made of two thicknesses of $\frac{1}{2}$ inch steel. The water-line belt, which goes from end to end, tapers from 8 inches amidships to 4 inches at the extremities; above again is another belt of 6-inch steel extending to the main deck, while the casemates for the secondary battery will be 5 inches thick, the armour on the barbettes being 10 inches. The armament will consist of four 12-inch guns, twelve 6-inch Q.F., twenty 12-pounder Q.F., and 28 smaller Q.F. guns. There are four under-water torpedo-tubes and two above-water in the bows. She will be furnished with torpedo-nettings.

The battle-ship "Borodino," building at the New Admiralty Works on the Neva, which is in the main of the same type as the "Cesarevich," is to have 700 tons greater displacement, being 13,600 tons. The vessel will not be sheathed with wood. Another peculiarity is that the frame will have supports on both sides so that when the compartments fill the resistance may be uniform. The "Orel," also of the "Cesarevich" type, is building at Galley Island, and will have the same features. There will be a special armoured protection of $1\frac{9}{16}$ inches in thickness, as a defence against torpedoes, while the thickness of the armour is to be as follows:—Water-line belt, 9 inches, tapering to 4 inches at extremities and below the water; upper belt from water-line to battery deck, 7 inches. The length of the vessel between perpendiculars is 397 feet; extreme beam, 76 feet; draught on an even keel, 26 feet. The engines are to develop 16,000-H.P. The curve of the decks is uniform.

The second-class cruiser "Aurora," of 6,630 tons, has been kept back to allow of the "Pallada" and "Diana" being proceeded with, but is to be ready for launching next spring. The walls of the Belleville boilers are in place. She will be the first ship in the Service to have the English Holl anchor. Her deck armour and parts of the engines are under construction in France, the former by the firm of Chatillon and Commentry of the St. Jacques Works. The "Osliabia" is also now progressing and the armour on the casemates of her 6-inch guns is in position and the water-tight doors will shortly be so. The elements of the Belleville boilers are near completion.

The second-class cruiser "Variag," 6,500 tons, now building at the Cramp Works at Philadelphia, is to be launched probably this month and be ready for sea by the autumn of next year. She will then be taken to Libau for her trials, and from thence sent to the Pacific. A crew will be sent to take charge of her at the end of this month. The dearth of steel for ship-building, caused by the present great demand, seriously hinders the construction. A new fast cruiser of 3,000 tons is also soon to be commenced in Denmark to the order of the Government.

The new fast steamer of the Volunteer Fleet, the "Smolensk," will be launched at Newcastle at the end of the present year and reach Odessa in time for the opening of navigation next year.

The following ships in course of construction have been christened and added to the Navy List:—

St. Petersburg.

Battle-ships—"Imperator Alexander III." and "Orel."

Copenhagen.

Cruiser—"Boyarin."

It has been laid down by the Technical Committee that when guns cannot be placed in the bows of a man-o'-war, there shall be special platforms with

47-millimetre guns for defence against torpedo-boats, in addition to the light fighting-tops with machine guns for sweeping the enemy's decks. In second-class cruisers and ships of 3,000 tons displacement these tops alone shall be fitted and at a lower level, as the guns above mentioned will not have to be allowed for, so as to allow of firing at torpedo-boats, if necessary.

The first ship to be constructed at the new works at Windau will be a cruiser with protected deck. Her displacement will be 6,375 tons; length, 412 feet; beam, 53½ feet; draught with full load, 20 feet 8 inches; speed 23 knots. Her engines are to develop 20,000-H.P. Steam will be provided by water-tube boilers of the Normand type. She will have two masts, each with a fighting top, and two bridges. The deck protection will be 2 centimetres in thickness along the whole length. Her armament will consist of twelve 6-inch Canet guns, 45-calibre, two in a fore and two in an aft turret, and eight in the casemates; twelve 7·5-centimetre 50-calibre guns in the battery, and eight 4·7-centimetre Hotchkiss guns; also five torpedo-tubes, two under-water broadside forward and three above-water, two broadside aft, and one right in the bows. Her freeboard will be 20 feet 6 inches.

Launch.—The new second-class cruiser "Pallada" was launched on the 12th ult. in presence of the Tsar and Tsarina. Her displacement is 6,600 tons; length at water-line, 406 feet; extreme beam, 55 feet; draught at stern, 21 feet. Her engines are estimated for 11,600-H.P., giving her a speed of 20 knots. Her armament will be eight 6-inch, twenty-four 3-inch, and ten smaller Q.F. guns.

Dockyard Work.—New Belleville boilers are being fitted on board the battle-ship "Imperator Nicolai I.," with a view to her forming part of the Gunnery Training Squadron for 1900. Her 9-inch and 6-inch guns and their carriages are to be sent for repairs while she is docked and her Kingstons overhauled.

A total sum of 11,000,000 (£1,760,000) roubles is to be spent in making the necessary improvements at Port Arthur. Two moles are to be constructed and the harbour considerably deepened, more especially the inner roadstead, and the fairway from the outer to it, which is to be deepened to 32 feet. Storehouses are to be set up and filled with all sorts of ships' necessaries, as well as munitions of war and provisions, the existing dock is to be lengthened, and a church and hospital and government buildings and barracks erected.

It is proposed to still further improve the Port of Archangel, so that the depth on the bar and all along the fairway to the town shall be 22 feet, thus making it accessible to ships of the same draught as the large ports of the Baltic and Black Seas. In order to secure access for large ships at all tides, this depth must be available at low water.

For Libau, a powerful dredger has been ordered from Messrs. Symonds, at Renfrew. At a depth of from 3 to 5 metres this dredger will clear some 400 cubic metres if the bottom is sandy, and 250 where there is clay. It can go by sea from one port to another in the Baltic, and will have its own motive power, and has water-tight bulkheads. It is built of the best quality of ship's steel.

From Port Arthur we learn that in addition to the large dock a smaller one is in process of construction for the torpedo-boats of the Siberian flotilla.

Stations of Ships in September.

Nagasaki.

Battle-ship—"Navarin."
Gun-vessel—"Otvajny."

Vladivostok.

Battle-ship—"Sissoi Velikie."
First-class cruisers—"Rossia," "Rurik," "Admiral Kornilov," "Dimitri Donskoi."
Second-class cruiser—"Rasboinik."

Port Arthur.
First-class cruiser—"Pamjat Azova."
Gun-vessels—"Mandjour," "Bobr," "Korietz," "Sivoutch."
Torpedo-cruiser—"Vsadnik."
Transport—"Tunguz."

Fusan.
First-class cruiser—"Vladimir Monomakh."

Cruising round Kwang-Tung.
Gun-vessel—"Gremiastchy."

Cruising round Commander Islands.
Transport—"Yakut."

MEDITERRANEAN.

Falero.
Battle-ship—"Imperator Alexander II."

Suda.
Gun-vessel—"Zaporojets."
Torpedo-boats—Nos. 119 and 120.

Copenhagen.
Coast-defence ironclad—"General-Admiral Apraxin."

Frozen Ocean, Tromze.
Transport—"Bakan." —*Kronstädstki Viéstnik.*

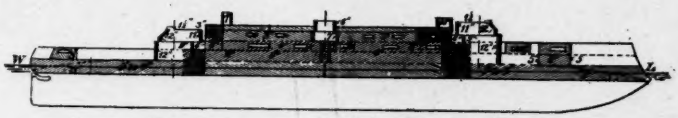
UNITED STATES.—*Proposed Armament for the Three Latest Battle-ships.*—By the courtesy of Rear-Admiral O'Neil, Chief of the Naval Ordnance Bureau, we are enabled to reproduce the accompanying plans, which were submitted to the Bureau of Construction as suggestions in regard to the armament and armour of our three latest battle-ships, "New Jersey," "Georgia," and "Pennsylvania," authorised by the last Congress. They show the many improvements which are possible on a given displacement as the result of the greatly increased resisting power of the latest type of armour, and also as the result of the increased energy due to longer guns and higher velocities.

Our Construction Bureau has never turned out a more creditable design than that for the "Alabama" class of battle-ships, and we notice that in the successive designs, first of the "Maine," and now of the "New Jersey" class, the Bureau has wisely maintained the general distinctive features of the "Alabama," and merely added such improvements as were possible, owing to the general advance which has been made in guns, armour, and motive power.

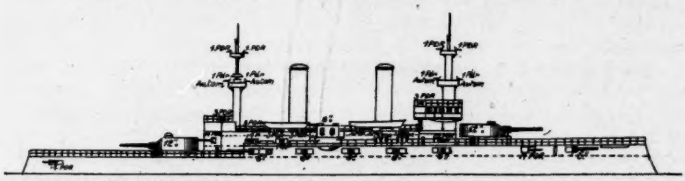
Rear-Admiral O'Neil has prepared five separate plans for the new ships. They all possess the highly meritorious and characteristic features of carrying extremely powerful batteries, and being provided with a very complete system of protection. While all of the designs are creditable, we must confess that the first of them, known as type A, of which we present two different views, appeals to us as being decidedly the most efficient, and containing the best combination and proportion of the different types of guns. The five designs are identical in displacement, speed, and in the arrangement of the protective armour. Each plan, moreover, provides the same number of guns of each calibre, and the same distribution in the secondary batteries; indeed, the only modifications in the plans are those relating to the main battery, in which are included the armour-piercing guns and the heavier rapid-fire weapons above 6 inches in calibre.

The distribution of the armour is in every way admirable, and is far more complete than anything that has yet been attempted in any of the Navies of the world. In the first place, there is a complete water-line belt, 8 feet in depth, which extends from stem to stern. It is 9 inches thick at its upper edge, and carries this thickness for a depth of 4½ feet, from which level it tapers gradually

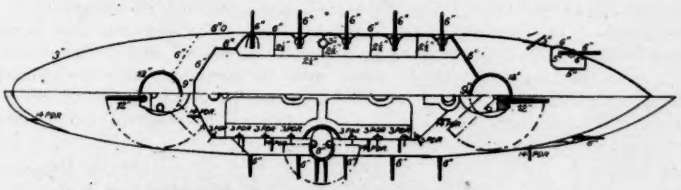
to 6 inches at the lower edge. This belt maintains these thicknesses over that portion of the ship extending between the 12-inch turrets, and at its extremities transverse bulkheads, 9 inches in thickness, extend diagonally inward to meet the barbette armour of the 12-inch guns. From abreast of these barbettes to the stem and stern the water-line armour is gradually reduced to 4 inches in thickness. From the top of the water-line belt to the level of the upper deck, and extending forward and aft, as shown on the plans, the sides are protected by 6-inch armour, at whose ends are diagonal walls 6 inches in thickness, the whole forming a complete central casemate or redoubt, within which are placed ten of the 6-inch rapid-fire guns. Every 6-inch gun is further protected on both sides by



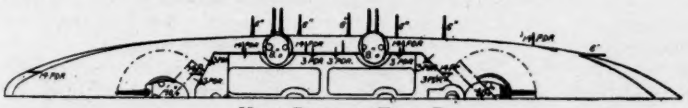
ARMOUR PROTECTION FOR THE FIVE TYPES OF BATTLE-SHIP.



SIDE ELEVATION OF PROPOSED BATTLE-SHIP, TYPE A.



HALF-PLANS OF UPPER AND MAIN DECKS, TYPE A.



HALF-PLAN OF TYPE B.

Alternative Plans for the Proposed Battle-ships of the "New Jersey" Class.

splinter bulkheads 2½ inches in thickness, and each of these separate casemates is closed at the rear by bulkheads of 2½-inch steel. The 6-inch guns in the bow of the vessel on the main deck are each protected by a complete casemate 6 inches in thickness on the outside, and with walls 5 inches thick in the interior of the ship. These casemates, like the main central casemate, extend from the protective deck clear to the upper deck. Above the central 6-inch gun redoubt there is another complete redoubt of 3-inch steel, within which is carried a battery of twelve 3-inch 14-pounder guns. There are also two 14-pounders on either bow on the main deck, just abaft of the 6-inch bow guns, while two others are placed on either quarter near the stern on the berth deck, all four of these guns being also protected by 3-inch armour.

The deck protection is also very complete. A protective deck, which is 2½ inches in thickness on the flat and 3 inches in thickness on the slopes, extends throughout the vessel. The deck above the central casemate or redoubt, in which the 6-inch rapid-fire guns are located, is to be of 2-inch plates at the extremities of these casemates, as shown in the accompanying armour plan. The barbettes for the 12-inch guns will be 12 inches in thickness outside the diagonal armour, and 9 inches on the inside, while the turrets are to have 12 inches of armour for the inclined port plates, the sides and the rear plates are to be 11 inches, and the top plates 1½ inches thick.

Amidships, on each side of the vessel, are to be a barbette and turret for a pair of 8-inch guns, the barbette armour to be 7 inches and the turret armour 6 inches in thickness, while a 3-inch ammunition-tube will extend down to the protective deck. Forward, above the 14-pounder battery, will be a conning-tower with 10-inch armour and a 6-inch armoured tube below leading to the protective deck; while aft, standing above the 14-pounder redoubt, will be a signal-tower protected with 7 inches of steel.

The armament will be extremely powerful. The main battery will consist of four 12-inch guns, 40-calibre guns, each of 58,221 foot-tons energy, disposed in the two main turrets fore and aft; four 45-calibre 8-inch rifles, each of 13,602 foot-tons energy, disposed in the two turrets amidships on either beam; and twelve 6-inch 50-calibre guns, each of 5,838 foot-tons energy, carried in the closed central casemate and the two bow casemates on the main deck. The secondary battery will consist of sixteen 3-inch 14-pounder guns, sixteen 3-pounders, sixteen 4-shot automatic pounders, six single-shot 1-pounders, ten machine guns, and two field pieces.

There is no ship afloat carrying a battery of such enormous energy as this, although by the time these three vessels are afloat—such is the rapidity of the development of naval armament—it is probable that they will be equalled, if not outmatched, by vessels already built or building in other parts of the world.

We welcome the return of the 8-inch gun. It proved itself to be the most efficient weapon used at Santiago and Manila, for although the hits were not so numerous as those made by the rapid-fire weapons of 6 and 5-inch calibre, the destructive effect was greater than that of any other type of gun carried in the war.

One of the plans herewith reproduced shows a modification in which there are eight in place of four 8-inch guns, arranged in four turrets, two on each beam. There are two other plans identical with this last, except that one of them substitutes four 10-inch guns for the 12-inch, and the other substitutes two 10-inch and two 12-inch for the four 12-inch. In the second, third, and fourth plans the fore and aft fire is the same as in the first plan, while the broadside fire is increased by two 8-inch guns. The fifth plan differs from all the others in having no 8-inch guns, and in carrying sixteen instead of twelve 6-inch guns, eight of these firing on each broadside, four dead ahead, and two dead astern. We think it is likely that the first of these designs will find most favour with our naval officers.

If, on a displacement of 13,500 tons, the Construction Bureau succeeds in building ships with this magnificent system of protection with such an unprecedented battery and with 18 knots speed, without reducing the necessary amount of stores, ammunition, and berthing accommodation, it will produce by far the most effective battle-ship that the world has ever seen.—*Scientific American.*

Practice Vessel for the Naval Academy.—A new vessel, to be called the "Chesapeake," is now under construction at the Bath Iron Works, and will, when completed, fill a long-felt want at the Naval Academy, where for years past the cadets have had to make their practice cruises on obsolete types of vessels,

fitted temporarily for the service, missing the important advantages of modern ship construction, modern battery, and the comforts naturally attached to modern design.

The appropriation of this much needed vessel last year was unfortunately confused. After deciding that a full-rigged sailing-ship was the proper type for the cadets, the wording of the bill was such as to include propulsion by sail and steam, although the estimates in the hands of the committees did not cover such a design. In amending the bill to exclude steam propulsion, however, the amount of the approporiation was reduced by half, so that the funds available were insufficient for a suitable practice vessel for the Naval Academy. The design was developed, however, as originally intended, and bids invited for the construction of the hull and so much of the fittings as the limited extent of the appropriation would permit. Further funds were made available in February last, increasing the available amount to 250,000 dollars (£51,562). The contract was finally signed on March 16th.

The keel of the "Chesapeake" was laid August 2nd of this year. The spars, boats, and outfits, furniture, etc., are in course of construction at the Boston Navy Yard, and, after the completion of the hull and fittings of the vessel at Bath, she will be rigged and equipped at that yard. The hull is to be of steel, but sheathed with 4 inches of yellow pine from the keel to about 2 feet above the water-line and coppered. The lower masts will be of steel and the yards and other spars of yellow pine or spruce.

The details of designs were prepared with the greatest care and met with the complete approval of the superintendent of the Naval Academy before being submitted to builders. There will be a modern battery and a complete installation of steam pumps, electric plant, distilling plant, refrigerating plant, steam, heat, etc., with the boilers necessary for these auxiliary purposes.

The design of the vessel having been based, from the first, on the particular requirements of the service for which she was intended, it is safe to predict a decided improvement in the course of practical instruction at the Naval Academy.

Pago-Pago Harbour.—The Government has entrusted the construction of the proposed coaling-station at Pago-Pago, Samoa, to Messrs. Healy, Tibbitts, & Co., engineers and contractors, of San Francisco. Lieutenant F. Chambers, of the United States Navy, assisted by two civil engineers, will be in general charge of the work. This will include a large steel wharf 350 feet long by 50 feet wide, with an approach 250 feet long and 35 feet wide. The piles will be of solid steel 80 feet long and 9 inches in diameter, and the couplings to be used on the piles will be of cast-iron. The water at the wharf will be 60 feet deep, and it is anticipated that this, together with the length of 350 feet, will afford accommodation for the largest vessel afloat. The construction of wharf and coaling-station will robably occupy six months and cost $250,000 (£51,562).

Names for New Ships.—Secretary Long has announced that the President has decided to confer the names of six States and six cities upon the three battle-ships, three armoured cruisers, and six unprotected cruisers authorised by the last naval appropriation law. The three battle-ships will be named "Pennsylvania," "New Jersey," and "Georgia," and the three armoured cruisers "West Virginia," "Nebraska," and "California." The small cruisers will be named "Denver," "Des Moines," "Chattanooga," "Galveston," "Tacoma," and "Cleveland."—*Army and Navy Journal.*

MILITARY NOTES.

PRINCIPAL APPOINTMENTS AND PROMOTIONS DURING OCTOBER, 1899.

H.R.H. George F. E. A., Duke of York, K.G., K.T., K.P., G.C.V.O., to be Hon. Colonel of the 1st (Duke of York's Own) Regiment of Bengal Lancers. Brevet Colonel F. Howard, C.B., C.M.G., A.D.C., to be a Major-General on the Staff, with the local rank of Major-General whilst so employed, to command an Infantry Brigade in Natal, and to have the substantive rank of Colonel in the Army. Brevet Colonel J. F. Brocklehurst, M.V.O., from Lieut.-Colonel Royal Horse Guards, to be a Major-General on the Staff, with the local rank of Major-General whilst so employed, to command a Cavalry Brigade in Natal, and to have the substantive rank of Colonel in the Army. Lieut.-Colonel W. F. N. Noel, to be a Colonel on the Staff for the Royal Engineers, and to have the substantive rank of Colonel in the Army. The following Lieut.-Colonels to be Colonels, viz :—W. Pitt, R.E. ; C. Wilkinson, R.E. ; M. E. Crofton, the King's Own (Royal Lancaster Regiment) ; H. H. Hart, R.E. Major-General and Hon. Lieut.-General Sir J. C. Rattray, K.C.B., to be Colonel of the Cameronians (Scottish Rifles). Major-General T. R. Stevenson, C.B., to be Colonel of the Princess Victoria's (Royal Irish Fusiliers). Colonel (local Major-General) Sir. W. P. Symons, K.C.B., from Major General on the Staff in Natal to be Lieut.-General on the Staff to command the Fourth Division in South Africa, with the local rank of Lieut.-General while so employed. Colonel D. D. T. O'Callaghan to be a Brigadier-General on the Staff to command the Royal Artillery at Malta, and to have the temporary rank of Major-General whilst so employed. Brevet Colonel W. W. Smith, h.p., R.A., to be a Colonel on the Staff, and to have the substantive rank of Colonel in the Army. Brevet Colonel L. A. Clutterbuck, A.S.C., to be an Assistant Adjutant-General, and to be granted the substantive rank of Colonel in the Army. Brevet Colonel J. A. F. Nutt, h.p., R.A., to be a Colonel on the Staff for the Royal Artillery and to have the substantive rank of Colonel in the Army. Colonel the Hon. H. F. Eaton, from Colonel commanding Grenadier Guards and Regimental District, to be Major-General. Colonel (local Lieut.-General) Sir W. P. Symons, K.C.B., Lieut.-General on the Staff in Natal, to be Major-General supernumerary to the Establishment, for Distinguished Service in the Field. Colonel R. Auld, from h.p., to be an A.Q.M.G., at Head Quarters. Colonel W. F. Vetch, from h.p., to be Assistant Director-General of Ordnance.

The under-mentioned principal appointments are made to the Staff for service in South Africa :—General the Rt. Hon. Sir Redvers Buller, G.C.B., K.C.M.G., V.C., to be General Commanding-in-Chief the Forces. Colonel the Hon. F. W. Stopford, C.B., to be Military Secretary to General the Rt. Hon. Sir Redvers Buller, G.C.B., K.C.M.G., V.C. Major-General Sir A. Hunter, K.C.B., D.S.O., to be Chief of the Staff. Colonel A. S. Wynne, C.B., to be Deputy Adjutant-General. Colonel H. S. G. Miles, M.V.O., and Colonel C. W. H. Douglas, A.D.C., to be Assistant Adjutant-Generals. Colonel R. Pole-Carew, C.B., to be Commandant Head Quarters. Surgeon-General W.D. Wilson, M.B., to be P.M.O. Colonel G. H. Marshall to be Major-General on the Staff, to command the Royal Artillery, with the local rank of Major-General whilst so employed. Colonel E. Wood, C.B., to be Major-General on the Staff as Chief Engineer, with the local rank of Major-General whilst so employed. The Rev. E. H. Goodwin, B.A., Chaplain to the Forces First Class, to be Principal Chaplain. Colonel R. F. N. Clarke, Ordnance Officer First Class, to be Chief Ordnance Officer. Colonel C. M. H. Downing to

be Colonel on the Staff to command the Corps Artillery. Lieut.-General P. S., Lord Methuen, K.C.V.O., C.B., C.M.G. to be Lieut.-General on the Staff to command the First Division. Colonel R. B. Mainwaring, C.M.G., to be Assistant Adjutant-General. Major-General Sir H. E. Colvile, K.C.M.G., C.B., to be Major-General on the Staff, to command the First Brigade. Major-General H. J. T. Hildyard, C.B., to be Major-General on the Staff, to command the Second Brigade. Major-General Sir C. F. Clery, K.C.B., to be a Lieut.-General on the Staff, to command the Second Division, with the local rank of Lieut.-General whilst so employed. Major-General A. G. Wauchope, C.B., C.M.G., to be a Major-General on the Staff to command the Third Brigade. Major-General the Hon. N. G. Lyttelton, C.B., to be a Major-General on the Staff to command the Fourth Brigade. Major-General Sir W. F. Gatacre, K.C.B., D.S.O., to be a Lieut.-General on the Staff to command the Third Division, with the local rank of Lieut.-General whilst so employed. Colonel R. E. Allen to be Assistant Adjutant-General. Major-General A. FitzRoy Hart, C.B., to be a Major-General on the Staff to command the Fifth Brigade. Major-General G. Barton, C.B., to be Major-General on the Staff to command the Sixth Brigade. Colonel J. W. P. French to be a Lieut.-General on the Staff to command the Cavalry Division, with the local rank of Lieut.-General whilst so employed. Colonel the Hon. G. H. Gough, C.B., to be Assistant Adjutant-General. Colonel J. M. Babington to be Major-General on the Staff to command the First Brigade Cavalry Division, with the local rank of Major-General whilst so employed. Colonel J. B. Brabazon, C.B., A.D.C., to be Major-General on the Staff to command the Second Brigade Cavalry Division, with the local rank of Major-General whilst so employed. Lieut.-General Sir F. W. E. F. Forestier-Walker, K.C.B., C.M.G., to have the general command and direction of the Lines of Communication in South Africa. Lieut.-Colonel and Brevet Colonel C. J. Long, R.H.A., to Command the Royal Artillery. Lieut.-Colonel and Brevet Colonel J. H. Yule, from the Devonshire Regiment, to be a Major-General on the Staff to command the Eighth Brigade, with the local rank of Major-General whilst so employed, and to be granted the substantive rank of Colonel in the Army.

The under-mentioned temporary appointments are made in consequence of the foregoing :—Major-General T. Kelly-Kenny, C.B., to be Lieut.-General on the Staff to command the Troops at Aldershot, and to have the temporary rank of Lieut.-General whilst so employed, during the absence of General the Rt. Hon. Sir Redvers Buller, G.C.B., K.C.M.G., V.C., in South Africa. Major-General H. M. L. Rundle, K.C.B., C.M.G., D.S.O., R.A., to be Deputy-Adjutant-General to the Forces during the absence of Major-General Sir C. F. Clery, K.C.B., in South Africa. Major-General H. C. Borrett to be Inspector-General of Auxiliary Forces and Recruiting at Head Quarters, vice Major-General T. Kelly-Kenny, C.B. Colonel J. H. Lage to be Assistant Adjutant-General at Head Quarters during the absence of Colonel R. E. Allen in South Africa. Colonel W. E. Franklyn to be Assistant Military Secretary at Head Quarters during the absence of Colonel A. S. Wynne, C.B., in South Africa. Colonel A. E. W. Goldsmid to be Deputy-Adjutant-General. Major-General W. F. M. Hutchinson, R.A., to be Commandant Staff College, during the absence of Colonel H. S. G. Miles, M.V.O., in South Africa. Brevet Colonel M. E. R. Rainsford, C.B., A.S.C , to be Assistant Adjutant-General during the absence of Colonel R. B. Mainwaring in South Africa, and to be granted the substantive rank of Colonel in the Army. Brevet Colonel F. B. J. Jerrard, h.p., to be an Assistant Adjutant-General, vice Colonel W. E. Franklyn, and to be granted the substantive rank of Colonel in the Army. Major-General H. R. Abadie, C.B., to command the Troops in the Eastern District during the absence in South Africa of Major-General Sir W. F. Gatacre, K.C.B., D.S.O. Colonel F. W. Hemming, from h.p., to be a Colonel on the Staff to command a Cavalry Brigade during the absence in South Africa of Colonel J. P. Brabazon, C.B., A.D.C., and to have the temporary rank of Brigadier-General whilst so employed.

HOME.—The general annual return of the British Army for the year 1898, with abstracts for the years 1879 to 1898 inclusive, has just been issued as a Blue-Book. The average strength of the Army in England, Scotland, and Ireland, and abroad during 1898 was 225,027, of whom 122,825 were serving abroad. The average effective strength of each arm was as follows:—Household Cavalry, 1,305; Cavalry of the Line, 17,848; Horse Artillery, 3,669; Field Artillery, 14,932; Mountain Artillery, 1,383; Garrison Artillery, 18,326; Royal Engineers, 7,860; Foot Guards, 6,958; Infantry of the Line, 138,033; Colonial Corps, 6,312; Army Service Corps, 3,613; Army Ordnance Corps, 1,373; Royal Army Medical Corps, 2,835; Army Pay Corps, 580. The effective strength on January 7th, 1899, was 231,851 of all ranks, consisting of 8,537 officers, 941 warrant officers, 14,769 sergeants, 3,527 trumpeters, drummers, and buglers, and 204,077 rank and file, the net increase of the non-commissioned officers and men during 1898 being 9,980.

The total number of courts-martial held during 1898 was 9,676 (5,463 at home and 4,213 abroad), the total number of offences for which the men were tried being 14,044 (8,276 at home and 5,768 abroad). Sentences were passed in 9,392 cases, and 284 prisoners were acquitted.

As to nationality, 165,038 non-commissioned officers and men were English, 17,285 Scotch, 28,358 Irish, 10,015 were born in India or the colonies, 97 were foreigners, and the country of birth of 1,580 was not reported.

The total enrolled strength of the Army Reserve (Class I.) was 78,798, and 4,202 of all ranks were wanting to complete the establishment; the number enrolled in Class H. was 41; the total number of all ranks in the Militia was 113,439, in the Yeomanry 10,207, and in the Volunteers 230,678, making a general total of 433,163.

INDIA.—Lieut.-General Sir George Luck, commanding the troops in Bengal, having recently recommended to the Commander-in-Chief in India that two vacant regimental commands of Bengal regiments should be filled by the selection of officers drawn from the Punjab Army, has made known in a circular order to the officers under his command his reasons for adopting this unusual course.

He says:—"There is no disguising the fact that the native infantry regiments of this command have of late years fallen into disrepute; that there is a feeling throughout the Army that they are seldom likely to be sent on active service, or to achieve distinction if so sent; and that, in consequence, the best class of young officers who join the staff corps as a rule do all in their power to avoid serving in them, while the energy and zeal for their profession of those unable to do this becomes heavily handicapped." This condition of things is, to a great extent, due, Sir George Luck thinks, to apathy on the part of commanding officers—first, in not studying the race question, so as to detect the evil of enlisting non-fighting races, and to apply the necessary remedy; and, secondly, in failing to combat the opposition of native officers and non-commissioned officers drawn from the non-fighting element and anxious to prevent the introduction into the ranks of new and better material. Sir George Luck is determined to raise the standard of these regiments, recognising as he does that the main disadvantage under which the Bengal Army labours will not be removed until the regiments composing that Army are made equally valuable as fighting units with those of the Punjab, and, therefore, equally likely to be sent on active service. The evil of the enlistment of non-fighting races being now generally admitted, it is impressed upon commanding officers, aided by their officers generally, that they should combat all opposition on the part of native officers to the introduction of better fighting material.

Sir George Luck concludes with these words:—"The lieut.-general commanding will no longer allow these regiments to be close preserves, as many are now, for the non-fighting races, or to continue on an admittedly lower standard of

efficiency; and in the case of vacancies among either commandants or other senior appointments in such regiments, unless he sees a marked determination in the officers who, in the ordinary course, might expect to succeed thereto to put forth the energy, zeal, and force of character, without which a change cannot be effected, he will be constrained to continue the course of filling such vacancies by officers either from the Punjab or from other regiments as the case may be who have the necessary qualities."

The rules relating to pensions for wounds in the Indian Army have been revised. In future, an officer who has received in action bodily injury certified by regular medical authority to be "very severe," though not equivalent to the loss of a limb, may, at the discretion of the Secretary of State, be allowed a gratuity of from three to twelve months' full pay of the appointment held at the time of the injury. If, after the expiration of twelve months, the injury is certified to be likely to be permanent in its effects, the officer may be granted a temporary pension at half the rates prescribed in the scale laid down in Article 619 of the Pay Warrant. Such pension will be renewable from year to year at the discretion of the Secretary of State. If renewed for five years and the bodily disability continues the pension may be converted into a permanent one.

AUSTRIA-HUNGARY.—The Austro-Hungarian Army is awaiting the inauguration of a certain number of important reforms, which have already been in hand for some time, but which the authorities have also for some time hesitated to decide upon. First of all comes the question of the pay of officers, which should be increased, for the various ranks, by an amount already fixed upon for a considerable time; but no decided steps have yet been taken in the matter. It is now thought, or at least hoped, that the new rates of pay will come into force on the 1st January next. It is true that some journals endeavour to make out that in the event of the elections of the delegates coming to nothing, officers will find themselves without any pay at all from the 1st January; but the Army is not at all disturbed by such rumours, such an eventuality not being considered as serious.

Next follows the formation of a new field artillery *matériel*, which naturally can only have as its basis a Q.F. gun. Germany already has one, and France will have completed the same work in 1900. Russia has already formed some trial batteries; and Italy, in its 1899 Budget, has set aside large sums for the construction of Q.F. field guns. Austria alone has nothing of the kind in hand, although it is, perhaps, the country which has the oldest *matériel* of any of the surrounding military Powers. The temporary transformation that it underwent, about two years ago, to obtain a species of provisional Q.F. gun, cannot be considered as a definite solution of the problem. Everyone agrees that this is a vital question that must be thoroughly solved, if one does not want the Army to go to war without any chance of ultimate success.

In the third place comes the improvement in the soldier's messing—an improvement taken in hand last year, but which has not yet been carried out, as the men have not yet been provided with a hot meal every evening. In most corps they only give the soldiers, under this name, a cup of very weak hot coffee five times a week. This is certainly not a serious solution of the question.

Finally, there is the question of the increase of the cadres. The Press has spoken about the formation of a 16th Army Corps, and of a contrivance which consists in taking their 4th Battalions from regiments, and of then grouping these battalions together two and two, in such a way as to form fifty-five new regiments of two battalions each, which will later be increased to three battalions.—*Le Progrès Militaire.*

FRANCE.—*The Concours Hippiques of France.*—Few English attending the Concours Hippiques in Paris appear to realise the importance of these meetings, or to understand that they are designed not merely for the display of riding over fences by cavalry and artillery officers and by gentlemen riders, but also for the encouragement of horse-breeding, and also for the general improvement of many points connected with the horse. Examinations, both oral and practical, in riding and driving, and in other matters connected with the proper management of horses, are held, details of which will be found in pages 8, 9, and 10 of the *brochure* "Concours de Dressage," issued by the "Société Hippique Française." This society publishes a yearly account of all their meetings. From this publication it appears that the society has been founded thirty-three years and has six leading *concours* or meetings, lasting at Paris twenty-three days, and at other places from nine to ten days each.

There are also twenty-eight "Concours Départmentaux," making a total of thirty-four in various parts of France.

The "Concours Départmental" held at Lyons lasts eight days, but at other similar meetings three days would be the average duration, a few being only one-day meetings. In addition to the "Concours Hippiques," the *Revue de Cavalerie* gives a list of the various military steeplechases and cross-country meetings which average yearly over 160 in various parts of France; it also gives plans of different courses, including the measurements of the fences. Vol. XXIV., page 624, shows the steeplechase course of Berlin (Carlshorst), and Vol. XXVI., pages 363, 631, and 755, the courses at Auteuil, Vincennes, and of Du Pin, in Normandy, respectively.

The highest jump over a bar is recorded by the "Société Hippique Française" as 1·80 metres, or 5 feet 10¼ inches, and the widest jump as 7·50 metres, or 24 feet 10 inches, both of which may be considered good. It may be remarked that these jumps have only been registered since 1897. The "Concours Hippiques," and all military races, are supervised by the Minister of War, and the July number of the *Revue de Cavalerie* contains at page 505, an order dated 4th July, 1899, signed Gallifet, which notifies that officers are not permitted to ride for money prizes, that they must be on the active list, must ride in uniform and their own chargers. If, however, officers ride in classes reserved for gentlemen riders, they may not ride their chargers, their rank may not be entered in the programme, nor may they ride in uniform. Officers commanding regiments are held responsible that only skilled officers compete, and that their horses are well schooled in jumping. Non-commissioned officers are not permitted to take any part in the "Concours Hippiques." The societies at which military officers compete, must send the programmes of their meetings to the officer commanding the district at least two months previous to those meetings. He forwards them to the Minister of War, making any remarks he may think fit. The competition amongst officers is confined to regiments quartered in the district of each *concours* (see *brochure*, page 2).

There is one great advantage that officers have at the meetings of the "Concours Hippiques," viz., of seeing the competition between the best gentlemen riders of France over much the same fences as they themselves have to negotiate. This is a most important point, as it keeps the riding of the officers on a par with that of the best French gentlemen riders. At Boulogne this year, several classes were open to horses of all ages and of all countries; three days were given up to jumping competitions for officers with about thirty horses, and seven days to gentlemen riders with about the same number of horses.

These facts all tend to show the great amount of practice French officers get in equitation, and also how keen they are to perfect themselves. They also confirm the statement of the great improvement made in the riding of the French cavalry mentioned in his most able report by the late Major-General Keith Fraser, C.M.G., Inspector-General of Cavalry, after his visit to Saumur in March, 1893.

General Keith Fraser states that every cavalry and artillery officer is obliged to go to Saumur for twelve months, after he has been a year with his regiment, many cavalry subalterns returning at a later period of their services in order to qualify for the post of Captain-Instructor, of which there is one in every cavalry regiment, and concludes his report with these words:—"The present system then has changed the French cavalry from being very inferior as regards equitation and training of horses, into probably the second best in Europe. This system has not been in force long enough for all cavalry officers to have had the advantage of it, but it has already had the result of turning the vast majority of them into good riders, and a great number into good instructors." The object of the Saumur course is to perfect officers in both the science and practice of equitation, and to make them into capable instructors, for, in the French cavalry, officers assisted by the Captain-Instructor are held responsible for the instruction of their men. There is little doubt that this system, together with the constant practice at the various competitions that take place in all parts of France, have made the French cavalry officer an efficient as well as a scientific horseman, and as a consequence the riding of the non-commissioned officers and men has proportionately improved.

Owing to climate, soil, and the division of property, Frenchmen know little about hunting, and have small practice in riding during boyhood, consequently France is not, and never could be considered, a horsy country, the great progress made in equitation of late years is, therefore, all the more remarkable. "Crafty" (M. Victor Gerruzey) in his work "Paris à Cheval," 1884, page 150, states :—"A few years back there was very great difficulty in finding riders for the "Concours Hippiques" who could jump their horses over fences, now any amount can do so." He also remarks at page 158 that when military riding was confined to the "Carrousel" the general public took but little interest in it, but now that the riding of the military and civilian riders is to be seen carried out at the "Concours Hippiques," greater interest is displayed by the public, who are in a position to judge and to see for themselves that the military and best civilian riding being, founded on scientific rules, are one and the same thing, varying only according to circumstances.

The "Concours Hippique du Nord" now takes place yearly at Boulogne towards the end of July, the most important day being the last Sunday, when the final prizes are competed for by the officers, and by the "Habits Rouges" (hunting dress), and although the meeting has only been held at Boulogne two years it is admirably managed, and is steadily increasing in public estimation. Being so easy of access from England, it is well worth a visit, especially having regard to its influence on French military riding, and it is needless to add that English officers would be cordially welcomed.—F. L. D.

The Government arsenal at Puteaux has been for some time at work on a new model machine gun, of the Hotchkiss type. The first specimens are now nearly ready and will shortly be issued to the Alpine corps, which will be the first regiments to receive them.

The new weapon, which consists in all of thirty pieces, easily taken to pieces and put together again, is formed of a single barrel in front of the receiver, the mechanism of which is said to be very simple. The cartridges are attached to a revolving brass band, which works automatically, each shot that is fired bringing the next one into position. The gun is provided with a butt, similar to that of an ordinary rifle, which the firer rests against his shoulder, with a pistol trigger and cut-off to regulate the fire. Its total weight, without supports, is 24 kilogrammes. Two men are required to work the gun, one to load and the other to point and fire it. Comparatively slow firing may be executed at the rate of 100 shots a minute, with rapid firing, however, 500 to 600 shots a minute can be discharged. The gun is provided with an apparatus to prevent over-heating. Various types of gun carriages may be used with it, according as it is required for mountain, field,

or naval service. For mountain service a folding tripod, carried on mule back, is used; for field service it is mounted on a wheeled gun carriage, provided with shields, and a limber; on board ship the machine gun is on a pillar mounting.—*Le Temps.*

The Colonial Minister has lately signed the following decree, dated the 17th October, 1899, which places under the civil power all the French possessions in West Africa, with the exception of territories recently placed under French influence, which are kept under the direction of two military commandants.

1st Article.—The territories which have up to the present date constituted the French Soudan cease to be grouped in one colony having its own administrative and financial autonomy.

The spheres of Kayes, Bafoulabe, Kita, Satadougou, Bamako, Segou, Djeune, Nioro, Goumbou, Sokolo, and Bougouni are attached to Senegal.

The spheres of Dinguiray, Siguiri, Kouroussa, Kankan, Kissidougou, and Beyla are attached to French Guiana.

The spheres or residences of Odjeuné, Kong, and Bouna are attached to the Ivory Coast.

The cantons of Kouala or Nebba, to the south of Liptako, and the Say territory, including the Djeunaré, Diongoré, Folmongani, and Botou cantons, are attached to Dahomey.

The spheres or residences of the district called the "the north and north-east region of the French Soudan," viz., Timbuctoo, Iumpi, Goundam, Bandiagara, Dori, and Onahigouya, as well as the sphere or residence of the district called the Volta region, viz., those of San, Onagadougou, Leo, Koury, Sikasso, Bobo, Dioulassou, and Djebougou, form two military districts, taken from the supervision of the Governor-General and placed under two military commandants.

2nd Article.—The Governor-General of French West Africa is charged with the chief political and military direction of all the territories belonging to Senegal, French Guiana, the Ivory Coast, and Dahomey.

3rd Article.—A general or superior officer fulfils the functions of commander-in-chief of the West African troops, under the Governor-General. He exercises his authority, from a military point of view, and under the chief supervision of the Governor-General, in the colonies of Senegal, French Guiana, the Ivory Coast, and Dahomey. The troops under his command are, according to political necessities, divided amongst the various colonies.

GERMANY.—During the Grand Manœuvres of 1899 cyclists were exclusively employed in the transmission of orders and reports, and the Germans seem to have given up all idea of using them as combatant troops during this year's Grand Manœuvres. In addition to the regulation cyclists attached to different corps, a group of 66, under the command of a captain of the Railway Brigade, was formed from the XIIIth Army Corps. Another detachment of 60 pioneer cyclists was formed from the XVth Army Corps.

The cyclists had been instructed in map-reading and surveying and in rendering correct reports. The infantry were armed with Model 91 rifle, shortened and made lighter, and the cavalry with the carbine. Their dress consisted of a cap, a tunic, a Litewka (jumper), a grey waterproof-cloak with hood, breeches, short leather leggings, and a pair of laced boots.

Throughout the manœuvres great use was made of cyclists as despatch-riders. These were split up into posts, or relays, and were generally about 15 kilometres distant from one another. The cyclist group formed from the XIIIth Corps were divided in the following way, viz.:—1 sergeant-major and 9 men at the disposal of the Head Quarters Staff; 1 non-commissioned officer and 6 men under the Director of Manœuvres at Carlsruhe; 1 acting sergeant-major and 8 non-commissioned officers employed as despatch-riders. The distance from Carlsruhe

to Stuttgart was divided into seven sections, at each of which a relay, consisting of 1 non-commissioned officer and 5 men, was established. Letters, telegrams, and orders were rapidly transmitted from one relay to another ; in this manner they arrived more quickly at their destination, and the cyclists were less fatigued. This service was carried on day and night. Another line of despatch-riders was also organised from Pforzheim to Markgröningen (approximately 32 kilometres), passing through Mühlacker and Vaihingen. This latter service was under the direction of a lieutenant of the Railway Brigade. On the 11th September the military operations took place more to the south, and the line of relays was consequently transferred with the same organisation, and passed through Wurmberg, Waissach, Markgröningen, and Hemmingen. The service was carried out with the utmost regularity and punctuality.

The German press bestows great praise on the detachment of pioneer cyclists, who crossed the Kinebis (Black Forest), at an altitude of 990 metres, in excellent condition, in spite of the bad state of the roads. This ascent took place, with the 30th Cavalry Brigade, on the day this cyclist division rallied the Cavalry Division A at Münsingen.

In conclusion, if one may believe the German press, the cyclists carried out the duty of transmitting orders and despatches in a most satisfactory manner, without being stopped either by the bad state of the roads, or by the rain, which, for several days, fell in torrents.—*Revue du Cercle Militaire.*

The passage of a river in conjunction with manœuvres took place on the Elbe, a short time ago, on the 20th August last, in the neighbourhood of Nieder-Lommatzsch and Riesa. The general idea of the experiment was that the enemy was on the left bank of the Elbe, and must be vanquished and put to flight. The enemy having crossed the river, it was of importance to take the pursuing cavalry division as rapidly as possible to the other side, in order to pursue the enemy and if possible attack him in flank. The crossing took place partly in barges, which were there at the disposal of the Waterworks, and partly in folding boats, a certain number of which every cavalry regiment carries with them. In addition to these, the pioneers crossed at each place in a few pontoons. The Guard Cavalry Regiment crossed over at Nieder-Lommatzsch-Seusslitz, the 1st Uhlans at Castle Hirschstein, the 2nd Uhlans at Merschwitz, the 1st Hussars at Boritz, the 2nd Hussars at Leutewitz-Nünschritz, and the Carabiniers at Moritz. The horse artillery was split up amongst all these places, so that the passage of the guns might be tried at each place.

The crossing of the Elbe took place in the following manner : the rider, with his horse's saddle, took his seat in a folding boat, and holding his horse securely by the reins, let it swim the river behind the boat. In this way six to twelve men with their horses and riding gear were conveyed across the Elbe with one boat. The guns were driven between two barges and then securely fastened to a platform of balks. The six horses were harnessed on the opposite bank, and drew the gun off in a very short time. The crossing took place uncommonly quickly, and was carried out with remarkable safety. Torches were used for lighting the river bank, but the full moon, besides shone so brightly that what was taking place on the river could be narrowly observed. All traffic on the Elbe was discontinued from 10 o'clock p.m. Punctually at 12 midnight the crossing began and shortly before 3 a.m. six cavalry regiments and the horse artillery, with all their men, horses, guns, and impedimenta, had been transferred from the left to the right bank of the Elbe, without an accident of any kind having occurred. To ensure the safety of the men, a manned boat lay below each place of crossing. The horses were saddled immediately on landing, and the different detachments rode off to their regimental places of assembly, and proceeded from there by different routes to the manœuvre ground. The various regiments then took up their positions under

cover, and shortly before 5 a.m. the division proceeded in the direction of Collennitz, the enemy leaving being marked down at Wildenhain. The sudden breaking out from cover, the advance of six cavalry regiments, the rapid drawing up, unlimbering and fire of the artillery, mingled with the crackle of the rapid fire of the cavalry, formed a beautiful military spectacle. When the Rodner Höhe was reached almost simultaneously and stormed by all the regiments, the "halt" was sounded, and a march-past of the whole cavalry division and the horse artillery took place before the divisional staff. By 6 a.m. the parade was over and the regiments returned to their quarters.

As is well known, war-dogs have been in use in the German Army for about fifteen years. This year, for the second time, a trial of these dogs was held at Oels, in Silesia, the results of which were most interesting, from various points of view. It took place on the 3rd and 4th July last, and a wooded country interspersed with cornfields was selected. Sixteen dogs, consisting of five collies, two short-haired German setters, four sheep-dogs, one poodle, and the rest cross-breeds, belonging to the Guards' Rifle and Jäger Battalions, took part in the trial.

Only officers of the Jäger battalions officiated as judges. Points were awarded for :—

1. Behaviour as watch-dog.
2. Returning to the trainer from reconnoitring party.
3. Going to the reconnoitring party from the trainer.
4. Following on the trail of the trainer.
5. Casting off.

Capacity for being lead on the leash, fetching and carrying ammunition, seeking for wounded, and giving tongue, were not tried for want of time.

Classification, according to points obtained, was awarded in a most searching manner. Only seven dogs gave notice of the approach of an enemy's patrol by a low growling, whilst five dogs barked loudly, and four took no notice whatever of the enemy.

The young dogs had to cover a distance of 2½ kilometres, and the old dogs 3 kilometres in the carrying of information from the piquet to the reconnoitring party and back, returning on the same errand, after the piquets had changed their positions about 200 metres during the dogs' absence. Ten dogs performed the errands in the most satisfactory manner, and, as was proved by the time-tables attached to their collars, with the utmost despatch. Taking all the dogs together they may be reckoned as having taken 4½ minutes to each kilometre. Dogs which gave an unsatisfactory performance in carrying despatches were debarred from taking any further part in the competition. The shortest time taken in the laying on of the dogs was 20 minutes. Following on the trail was tried for a distance of 600 metres, and it is certainly remarkable that whilst eight dogs did not reach their trainers either from inability to take up the trail or by losing it, the five collies fulfilled this test in the most satisfactory manner. The other eight dogs relied too much on their eyes and too little on their noses. Unfortunately, it is just the dogs of the sporting class which cannot be employed as war-dogs, owing to their partiality for game, for no reliance can be placed on their following a trail if it is crossed by game of any kind. The five collies, crosses between English and Scotch sheep-dogs, belonging to the 6th Jäger Battalion, showed to the best advantage. They proved themselves sufficiently alert, obedient, intelligent, with good noses, and indifferent to game. The poodle, however, took the first prize, with a total of 96 points. There will take place this year a winter trial of war-dogs in the snow and ice, and for this a prize of 1,000 marks has been offered from a private source.—*Deutsche Heerrs-Zeitung.*

The *Militär-Wochenblatt* publishes an article on shooting tests in the German Army with reference to the rifles and to the men. The preliminary test for

men desirous of entering the special shooting class is that each man shall make three consecutive centres at 150 metres. The centre of the target used is 30 centimetres (about 1 foot) in diameter, and the three points hit must not be so distributed that they cannot be enclosed in a rectangle 24 centimetres high by 18 broad. The superficies of this rectangle is 432 square centimetres, while that of the centre is 707 square centimetres. In testing the rifles, the gun is pointed resting on a sandbag, and five consecutive shots at 150 metres must hit a rectangle 48 centimetres high by 18 broad, but no two shots must be more than 24 centimetres distant in a vertical line, so that the five points hit must also in this case lie within a rectangle 24 centimetres by 18. It is evident that this test permits a rifle with a dispersion of, say, 20 centimetres too high or too low at 150 metres to pass muster. It is necessary, therefore, that the user of a particular rifle should know its dispersion, but it is an open question whether the dispersion ascertained at 150 metres holds good for greater distances, or when the gun is not held horizontally. In testing cartridges 30 shots are fired, and 96 per cent. must hit points within a rectangle 40 centimetres high by 25 centimetres broad, and 60 per cent. within a rectangle 15 centimetres high and 10 centimetres broad. This is done five times, and the whole of the 150 shots must have hit within a rectangle 1·7 metres high by 2·4 metres broad. The writer in the *Wochenblatt* criticises the tests and advocates a larger expenditure on them, so that the men may have more reliable rifles and cartridges.

The total weight carried by a German infantry soldier amounts to about 59 lbs., and is thus distributed:—

Clothing	about	11¾ lbs.
Equipment	,,	8¾ ,,
Field kit	,,	12¼ ,,
Rifle, bayonet, and cartridges...	,,	18¾ ,,
Haversack with rations	,,	7½ ,,
Total		59 lbs.

The Clothing consists of a tunic with stock, cloth trousers, drawers, braces, shirt, boots, socks, field dressing, handkerchief, identity badge.

The Equipment consists of helmet with nickel plate, helmet cover, valise with strap, roll of canvas for tent, waistbelt and badge, bread-bag, mess-tin, sword-knot, two cartridge-pouches, water-bottle, and drinking-tin.

Field Kit.—Great coat and cape, three coat straps, tent accessories, fatigue cap, shirt, shoes, socks, pocket-ledger and song-book, tooth-brush, handkerchief, knife and fork, and housewife.

Rifle, Bayonet, and Ammunition.—Rifle, bayonet. 90 rounds are carried in the pouches, and 30 in the valise.

Rations.—Biscuit, preserved meat, preserved vegetables, salt, coffee, rice, breakfast bread, tobacco, cigars, etc.—*Le Progrès Militaire.*

ITALY.—The number of young men of the 1877 (1897) class registered on the levy lists amounted to 298,460. By including those postponed from the 1876 (1896) and from the 1875 (1895) classes, which amounted respectively to 63,804 and 36,378, a total of 398,642 is arrived at, as the recruiting resources, which is classified in the following manner:—

Unfit for service	85,256
Debarred from service	157
Recruits failing to appear	18,000
Postponed	95,643
Enrolled in the Land Forces (*a*)	100,407
Surplus of young men who are fit	551
Posted to Territorial Militia	94,215
Enlisted as Volunteers in the Army (*b*)	4,413
Total	398,642

By adding to the numbers indicated by the letters (*a*) and (*b*) those who enlisted voluntarily into the Army before the age for military service—about 4,578—a total contingent of 109,398 men is obtained for the year 1898.

Under the heading of "Instruction," those inscribed as fit for service are divided as follows :—

Able to read and write	... ...	121,457, or 60·85 per cent.
Able to read only ...	... .	3,526, or 1·77 ,, ,,
Unable to read or write	... ...	74,603, or 37·38 ,, ,,

The men of the 1877 class, like those of the 1876 class, have been twice called to the colours—the mounted branches on the 25th November, 1897, and the infantry and military train in the month of March, 1898.—*Bulletin de la Presse et de la Bibliographie Militaires.*

Mounted officers of the Italian Army have to mount themselves at their own expense by purchase in the open market. They may, certainly, after a fashion and under heavy penalties, take horses belonging to the State, but this privilege is hedged round by many restrictive clauses, which prevent this method of remount from becoming universal. The Minister of War is, therefore, about to issue a new regulation, which will, in future, determine the conditions under which these horses may be obtained.

The horses with which officers may provide themselves under this heading are called "Cavalli d' agevolezza." They are divided into two lists, viz., the Special List and the General List.

1st. The Special List is sub-divided into two, viz :—

List A.—Horses for general officers. These horses are selected from those of the cavalry school, are well mannered and perfectly trained ; they must be from seven to twelve years old. Their price must not exceed 2,500 francs.

List B.—Horses for general staff, cavalry, and artillery officers. These horses must be from four to seven years old ; if they come from remount depôts their price must be between 1,250 and 1,500 francs, if they are bought abroad their price may not exceed 2,500 francs.

2nd. The General List, which is sub-divided into three, viz :—

1st List.—Horses for officers of the staff, cavalry, and artillery, for colonels and lieut.-colonels of the infantry, engineers, medical staff, commissariat, etc. Horses of this list must be between five and nine years, and their price must be between 900 and 1,200 francs.

2nd and 3rd Lists.—Horses for officers of all ranks of infantry, engineers, of the medical, commissariat, and veterinary departments. Horses of the 2nd List must be between nine and twelve years and their price between 500 and 850 francs. Horses of the 3rd List must be between twelve and fourteen years old and their price between 300 and 450 francs.

Officers who have acquired a horse "d' agevolezza" pay the State for them by giving up their horse allowance until the price of the horse they have chosen is paid. In any case they may not become indebted to a greater extent than 2,000 francs if they are general officers, than 1,500 francs if they are entitled to a horse allowance of 400 francs or more, than 1,200 francs if their horse allowance is 340 francs, and not more than 1,000 francs if their allowance is 280 francs. The horse becomes the property of the officer as soon as this indebtedness towards the State ceases. Lastly, in order that officers may mount themselves as they wish, they are allowed to select their horse in the open market and the State advances the necessary sum for its purchase, provided its price does not exceed the limits fixed above.—*La France Militaire.*

Some days before the changes of garrison, which were carried out after the autumn manœuvres, a Ministerial note warned the corps interested that war-dogs

would be carried on the railways at a reduced rate. This is the first Italian official document which treats of the question of war-dogs.

According to the *Italia Militare e Marina*, the Italian Army, following in this the example of the German Army, which expresses itself satisfied with the results obtained, commenced a series of trials with war-dogs in the month of February, 1897, The 6th and 33rd Infantry Regiments first received four dogs and two bitches, aged from three to four months, of the sheep-dog class, to train for sentry duty at out-posts, for the supply of ammunition, and for the search for wounded on the battle-field. The trials they have hitherto conducted with these intelligent animals has succeeded perfectly, but the military authorities propose continuing them up to January, 1900, by which time they will be fully informed as to the recognised aptitude of the descendants of the first couples entrusted to the infantry.

At Maddalena the Navy has used "guard-dogs" with great success. These dogs, which have been regularly used in the Talmonaccio battery, have been the cause of half the number of sentries being discontinued in that malarious district. Two dogs of the same species are to be given to Spezia.

RUSSIA.—After the Caucasian Army had been re-constructed on the same basis of the Armies of Russia in Europe (JOURNAL for July, 1899), an order of the 30th June last laid down a similar re-organisation for the military forces of Russia in Asia. All the units in Turkestan and in the Trans-Caspian district are now grouped into two army corps under the sole command of the Governor-General of Turkestan. These army corps are:—

The 1st Turkestan Army Corps, which has its headquarters at Taskent, consists of 19 infantry battalions, 1 battalion of engineers, 8 batteries of artillery, and 16 sotnias of Cossacks.

The 2nd Turkestan Army Corps, which has its headquarters at Merv, consists of 13 infantry battalions, 1 battalion of engineers, 1 company of garrison artillery, 6 batteries of artillery, and 16 sotnias of Cossacks.

This grouping of all the Turkestan forces into two army corps was effected with the simple view of conferring a wider scope for individual energetic action on the command, but the military forces remain constituted, as formerly, in brigades, and until the promulgation of a fresh order, divisional organisation does not exist.

The artillery of the 1st Army Corps consists of:—The 1st Turkestan Artillery Brigade of four batteries, one of which is a mountain battery, the 2nd Cossack Orenbourg Battery and the Turkestan Horse Artillery Battery.

The artillery of the 2nd Army Corps consists of:—The 2nd Turkestan Artillery Brigade, formed by 3 Trans-Caspian batteries, the 6th Turkestan Light Battery, and a mortar battery which has still to be formed; the 4th Cossack Kouban Battery, and the company of artillery from the fortress of Kouchk.

In consequence of the formation of these new army corps, the only forces which now remain constituted as independent brigades are those which were raised in the Amour military district, viz.:—5 infantry brigades, or 24 battalions; 1 calvary brigade, or 29 sotnias; 2 artillery brigades, or 19 batteries.—*Militär-Zeitung.*

According to the Russian journals, the General Staff has laid before the Council of War a scheme which is meant to greatly modify the present regulation for the promotion of officers of the Army. According to this scheme, the promotion of subaltern officers will invariably be made according to their length of service, and the duration of service in the rank of lieutenant and of second captain will be fixed at a total of eight years in both ranks combined. This beneficent reform will greatly diminish the time passed in the inferior ranks, and at the same time give a wider scope to the rights and privileges conferred on higher military education.

At present the promotion of infantry and cavalry subaltern officers is made regimentally, and in spite of the great deficit of officers in the Russian Army (14 per cent. of the regulation peace effective) promotion is exceedingly slow, officers remaining for from twelve to twenty years in the rank of lieutenant and second captain.

Regiments stationed in large towns attract the greater number of officers, and promotion is, consequently, slower in these than in bad garrisons; this situation is evidently not normal, and one asks why certain officers advance more rapidly than others to superior rank, when their only merit is that they belong to a regiment in which vacancies occur more rapidly. The new scheme solves the promotion question in the most reasonable manner. Every officer will become a first captain after twelve years' service, of which four years will have been passed in the rank of sub-lieutenant, and eight in that of lieutenant and second captain. In the superior ranks promotions will be made throughout each branch of the Service, in the cavalry, infantry, etc.

Another consequence of this state of things will be the possibility for officers to take a far greater advantage of the rights conferred on them on leaving the military academies. The Staff College has for its chief object the expansion of scientific military knowledge amongst officers, and secondly to recruit the Staff Corps. Only a small number of the officers leaving each year is attached to the Staff, the others rejoin their respective corps, with the right of promotion to the rank of superior officer after passing four years in that of first captain. According to the present condition of affairs, this privilege has sometimes to be awaited for a considerable time, because an officer rejoining his corps may have to serve ten, fifteen, or even twenty years before attaining the rank of first captain. Thus many "academicians," with such a future before them, leave their regiments and endeavour to obtain a billet in the commissariat staff, some office, or elsewhere, where there is no necessity for superior military attainments. It was most certainly not with a view to making commissariat officers that the Staff College course was instituted. It was hoped that officers would spread the knowledge they had acquired amongst their regiments, and so render good service to the Army. The present scheme provides a remedy for this situation. The Staff College man will now not have long to wait before attaining the rank of first captain, and in consequence that of superior officer; he may even be nominated lieut.-colonel (there is no rank of major in the Russian Army) at the end of fifteen to seventeen years' service. Officers who have received a superior military education are thus induced to remain with their regiments, where they may communicate and apply the instruction they themselves have received.

It is clear that this scheme lessens the number of years' service in the inferior ranks, makes the subaltern cadres more youthful, and provides a constant flow into regiments of officers leaving the academies. If one considers the other Armies of Western Europe, one sees that the average age of first captains is 45 years, and that of superior officers more than 50; officers of the Staff and of the Artillery are younger, first captains being, on an average, 40 years of age, and of superior officers about 50. By means of this scheme, therefore, the commissioned ranks of the Russian Army will be younger than those of any other.—*La France Militaire*.

CORRESPONDENCE.

THE following note on the lecture on Hill-Fighting, delivered by Major-General Sir W. F. Gatacre, K.C.B., D.S.O., at the Royal United Service Institution, and published in the October number of the JOURNAL, has been forwarded to us by Major-General Gosset, C.B., etc. :—

"The lecture deals with many important points connected with hill-fighting in India, and all Sir William Gatacre's hints are useful; but it does not appear to have struck him, nor the officers who took part in the discussion that followed, that our Army, which has to fight in every quarter of the globe, requires to be taught how to skirmish.

Anyone who follows the action of Craufurd's Light Division in the Peninsular War realises that the secret of its success lay in the fact that every man was a trained skirmisher. We are apt in peace-time to gradually forget the lessons learnt in war, and this, I take it, is the reason that skirmishing has gradually been eliminated from our Drill-Book and become a lost art.

I do not say this with any feeling that the principles laid down in Part V. of our Drill-Book are unsound—theoretically they could not be better, but practically they have failed; and individuality, which is the keynote of the attack as regards the firing line, is in many battalions non-existent. I do not propose to discuss the causes of this failure, but to point out that we had in our old drill-books a system of attack eminently suited to the national character and the outcome of practical experience in the field.

Neither the improvement in fire-arms nor other altered conditions of modern warfare have rendered any change necessary, and instead of copying foreign models we should have done better to have taken what was good in our old system of attack and worked on it alone. In old days we had a light infantry company in every battalion, and, in addition, battalions of light troops, specially trained as such; but in these days all infantry may be regarded as light infantry, and the essence of the first stages of an attack is good skirmishing. In the last twenty years the shooting of the British Army has improved enormously, and fire discipline and fire control are something more than mere names; but we are so wedded to volley-firing, and the men are so accustomed to look to orders from the rear, that they at once lose their individuality, and the main object of our Drill-Book, as regards the firing line, goes to the wall.

For this reason I am of opinion that collective firing should cease as soon as the firing (or skirmishing) line comes under the enemy's fire, and that individual fire should take its place. Moreover, it is often forgotten when once the firing line is thickened the noise is so great that the word of command may not be heard, or, if heard, obeyed.

If volley-firing is used at all, it should be by special parties on the flank or other position from whence it would be effective.

If this is done we shall release the soldier from the bad habit he has got into of being perpetually on the look-out for orders to fire volleys, and by carefully training him as a skirmisher he can assume the individuality we require. He will then be prepared to fight on fairly equal terms Afghans in their rugged mountains, Burmese in their forests, and Boers behind their rocks and krantzes.

When we learn more of the tactics employed in the recent action fought by General Symons, we shall probably find that he occupied the time before the outbreak of hostilities in carefully training his men in this particular, and that his victory was due not only to the bravery and devotion of the officers and those under them, but to the skill of the men as skirmishers."

NAVAL AND MILITARY CALENDAR.

OCTOBER, 1899.

1st (S.) 1st Bn. Lancashire Fusiliers arrived at Crete from Malta on the "Jelunga."

2nd (M.) 21st Batt. Royal Field Artillery and 26th Company Field Hospital Corps arrived at Durban from India on the "Lalpoora."

,, ,, 2nd Bn. Rifle Brigade left Crete for South Africa on the "Jelunga."

3rd (T.) H.M.S. "Barham" commissioned at Portsmouth for Mediterranean.

,, ,, E Batt. Royal Horse Artillery and 7th Company Eastern Division Royal Garrison Artillery left England for India on the "Dilwara."

,, ,, 2nd Bn. Grenadier Guards arrived in England from Gibraltar on the "Nubia."

,, ,, Lieut.-General Sir George White, G.C.B., G.C.S.I., G.C.I.E., V.C., and Staff arrived at Natal from England on "Tantallon Castle."

,, ,, 42nd Batt. Royal Field Artillery arrived at Durban from India on the "Secundra."

4th (W.) H.M.S. "Grafton" paid off at Chatham from China.

5th (Th.) H.M.S. "Hermes" commissioned at Devonport for North America and West Indies.

,, ,, Launch of torpedo-boat destroyer "Oboro" from Yarrow Works for Japanese Government.

,, ,, Headquarters and four Companies 1st Bn. Devonshire Regiment arrived at Durban from India on the "Sutlej."

,, ,, Four Companies 1st Bn. Devonshire Regiment arrived at Durban from India on the "City of London."

,, ,, One Squadron 19th Hussars arrived at Durban from India on the "Pandura."

,, ,, 2nd Bn. King's Royal Rifles arrived at Durban from India on the "Purnea."

,, ,, 53rd Batt. Royal Field Artillery arrived at Durban from India on the "Booldana."

,, ,, The 2nd (North) Regiment Royal Guernsey Militia disbanded in consequence of insubordination.

6th (F.) One General Hospital Corps, three Companies Army Ordnance Corps and twenty Companies Army Service Corps left England for South Africa on the "Braemar Castle."

,, ,, 1st Bn. Royal West Kent Regiment left India for Aden on the "Dunera."

7th (Sat.) Nos. 1, 2, 3, and 5 Companies Army Ordnance Corps left England for South Africa on the "Mexican."

,, ,, 1st Bn. Northumberland Fusiliers, 9th, 13th, and 31st Companies Army Service Corps, and 4th Company Army Ordnance Corps, arrived at Natal from England on the "Gaul."

,, ,, One Squadron 19th Hussars arrived at Durban from India on the "Vadala."

,, ,, Four Companies 2nd Bn. Gordon Highlanders arrived at Durban from India on the "Palitana."

,, ,, Proclamation issued calling out the 1st Class Army Reserve.

8th (S.) Two Squadrons 5th Dragoon Guards left India for South Africa on the "Virawa" and "Patiala."

9th (M.) One Squadron 9th Lancers arrived at Durban from India on the "Wardha."

" " One Squadron 19th Hussars and four Companies 2nd Bn. Gordon Highlanders arrived at Durban from India on the "Sirsa" and "Worona."

" " 1st Bn. Gloucester Regiment arrived at Durban from India on the "Indian."

" " The Transvaal Government despatched an ultimatum to the British Government containing the following demands, viz. :—1. All points of difference shall be submitted to arbitration or some other amicable method. 2. The British troops shall be instantly removed from the borders. 3. All reinforcements landed in South Africa shall be withdrawn in a reasonable time. 4. Those now on the high seas shall not be landed in any South African port.

10th (T.) The Squadron New South Wales Lancers left England for South Africa on the "Nineveh."

" " Two Squadrons 9th Lancers arrived at Durban from India on the "Nowshera" and "Nairung."

" " The British Government declined to discuss the terms of the ultimatum of the Transvaal Government.

11th (W.) The British Diplomatic Agent, Mr. Conyngham Greene, left Pretoria for Capetown, handing over the care of the British subjects in the Transvaal to U.S. Consul.

" " One Squadron 5th Dragoon Guards arrived at Durban from India on the "Lindula."

12th (Th.) Launch of second-class cruiser "Diana" at the Galernii Island Works, St. Petersburg, for Russian Navy.

" " Launch of torpedo-cruiser "Agordat" at Castellamere for Italian Navy.

" " 1st Bn. Royal Irish Fusiliers arrived at Durban from Egypt on the "Avoca."

" " An ammunition column and field hospital arrived at Durban from India on the "Nevassa."

" " An ordnance park and field hospital arrived at Durban from India on the "Hensada."

" " Boer troops enter Natal in three columns, by way of Laing's Nek, Botha Pass, and Wakkerstroom Pass.

" " Armoured train derailed by the enemy at Mafeking. Wreckage shelled, and Lieutenant Nesbitt and fifteen men and two guns captured. Lieutenant Nesbitt and fourteen men wounded.

13th (F.) 15th Hussars arrived in India from England on the "Simla."

" " Reconnaissance in force by Sir G. White from Ladysmith towards Acton Homes. Boers retreated, declining battle.

" " Newcastle evacuated by the inhabitants.

14th (Sat.) H.M.S. "Barham" left Portsmouth for Mediterranean.

" " General the Rt. Hon. Sir Redvers Buller, G.C.B., K.C.M.G., V.C., and Staff, and the Army Post Office Corps, left England for South Africa on the "Dunottar Castle."

" " Colonel Baden-Powell made a sortie from Mafeking and attacked the enemy; British casualties 17; Boer losses heavy, some accounts giving them as 300 killed.

" " Wires from Kimberley and Mafeking southward cut.

15th (S.) 1st Bn. Royal West Kent Regiment arrived at Aden from India on the "Dunera."

" " Newcastle occupied by the Boers.

15th (S.) Armoured train action at Spyfontein, south of Kimberley. Boers repulsed with the loss of five killed and many wounded. No British casualties.

,, ,, Vryburg betrayed to the Boers.

16th (M.) 2nd Bn. Derbyshire Regiment left Aden for Malta on the "Dunera."

,, ,, A Balloon Section R.E., No. 5 Company Army Service Corps, and a Remount Company (500 horses) arrived at Capetown from England on the "Kinfauns Castle."

17th (Tu.) H.M.S. "Royalist" arrived at Plymouth from Australia.

,, ,, Special Ammunition Column arrived at Capetown from England on the "Gaika."

18th (W.) Launch of first-class battle-ship "Bulwark" at Devonport

,, ,, Launch of first-class gun-boat "Zélée" at Rochefort for French Navy.

,, ,, Launch of first-class battle-ship "Kaiser Karl der Grosse" at Hamburg for German Navy.

,, ,, The Government announced the calling out of the Militia and Militia Reserve.

19th (Th.) The Boers capture a train at Elands Laagte station with some officers, men, and civilians.

20th (F.) Launch of submarine-boat "Narval" at Cherbourg for French Navy.

,, ,, British victory at Dundee. British losses 239 killed and wounded. General Symons mortally wounded. A squadron of British Hussars captured. Boer loss 500 to 600 killed, wounded, and prisoners.

,, ,, The 11th Hussars left India for Egypt on the "Simla."

,, ,, The 2nd Bn. Royal West Surrey Regiment, and Detachment No. 2 Company, R.A.M.C., left England for South Africa on the "Yorkshire."

,, ,, 2nd Brigade Staff
Special Service officers
2nd Bn. W. Yorks. Regiment
No. 2 Company, R.A.M.C. (bearer company)
Depôt Companies R.A.M.C. (Field Hospital)
Signalling officers
Army Servive Corps
Army Pay Department and Corps
Civilian medical officers
} Left England for South Africa on "Roslin Castle."

,, ,, Detachment 2nd Bn. East Surrey Regiment
Half 2nd Bn. Northamptonshire Regiment
Detachment Depôt Companies R.A.M.C. (F. H.)
} Left England for South Africa on "Harlech Castle."

,, ,, H. Q. and 7 Companies, 2nd Bn. East Surrey Regiment
Detachment Depôt Companies R.A.M.C. (F. H.)
Army Pay Corps
} Left England for South Africa on the "Lismore Castle."

,, 2nd Bn. Devonshire Regiment
Detachment Depôt Companies R.A.M.C. (I.H.)
Details, Staff, etc, Mounted Infantry
} Left England for South Africa on the "Manila."

21st (Sat.) British victory at Elands Laagte. British losses about 250 killed and wounded. Boer casualties—100 killed and wounded, 200 missing, 300 captured.

,, ,, 1st Bn. Scots Guards
Half 2nd Bn. Northamptonshire Regiment
No. 18 Company R.A.M.C. (F.H.)
Details
} Left England for South Africa on the "Nubia."

,, ,, 2nd Bn. Coldstream Guards
1st Telegraph Division R.E.
31st (Fortress Company) R.E.
No. 18 Company R.A.M.C. (Bearer Company)
Ordnance Survey R.E.
No. 19 Company R.A.M.C. (F.H.)
Details
Line of Communication Staff
} Left England for South Africa on the "Gascon."

,, ,, 1st Brigade Staff
3rd Bn. Grenadier Guards
10th (Railway) Company, R.E.
Regimental Staff (1st Division) R.E.
17th (Field) Company R.E.
Detachment No. 18 Company R.A.M.C. (Bearer Company)
} Left England for South Africa on the "Goorkha."

,, ,, 2nd Bn. Seaforth Highlanders
No. 8 Company R.A.M.C.
No. 4 Stationary Hospital
} Left England for South Africa on "Mongolian."

,, ,, The New Zealand contingent, 213 officers and men and 280 horses } Left New Zealand for South Africa on the "Waiwera."

,, ,, Headquarters and one Squadron 14th Hussars left England for South Africa on the "Siberian."

,, ,, One Squadron 14th Hussars
19th Company R.A.M.C.
} Left England for S. Africa on the "Jamaican."

22nd (S.) H.M.S. "Hermes" left Plymouth for West Indies.

,, ,, 1st Bn. Border Regiment arrived at Cape Town from Malta on the "Sumatra."

,, ,, 2nd Bn. Royal Highlanders (Black Watch)
Mounted Infantry Staff
2nd Cavalry Brigade Staff
Northern Company Mounted Infantry
Western Company Mounted Infantry
Detachment No. 3 Company R.A.M.C.
} Left England for South Africa on the "Orient."

,, ,, 1st Cavalry Brigade Staff
One Squadron 12th Lancers
Detachment No. 9 Company R.A.M.C.
} Left England for S. Africa on "City of Vienna."

,, ,, One Squadron 12th Lancers left England for South Africa on the "Mohawk."

,, ,, 1st Bn. Coldstream Guards
Det. No. 18 Company R.A.M.C. (F.H.)
Draft 8th (Depôt Railway) Company R.E., details
Mounted Infantry Staff (1st Brigade)
Aldershot Company Mounted Infantry
Southern Company Mounted Infantry
Machine Gun Section
} Left England for South Africa on the "Malta."

22nd (S.) 2nd Bn. Royal Fusiliers
2nd Bn. Royal Scots Fusiliers
No. 17 Company R.A.M.C. (Bearer Company)
— Left England for South Africa on the "Pavonia."

23rd (M.) 2nd Bn. Scottish Rifles
Detachment No. 8 Company R.A.M.C.
— Left England for S. Africa on the "City of Cambridge."

6th Brigade Staff
1st Bn. Royal Welsh Fusiliers
No. 11 Company R.A.M.C. (F.H.)
— Left England for South Africa on the "Oriental."

,, ,, 2nd Bn. Royal Irish Fusiliers
No. 17 Company R.A.M.C. (Bearer Company)
— Left England for South Africa on the "Harwarden Castle."

,, ,, 3rd Brigade Staff
1st Bn. Highland Light Infantry
No. 1 Company R.A.M.C. (Bearer Company)
Regimental Staff R.E., 2nd Division
11th (Field) Company R.E.
Mounted Infantry, S.E. Company, Cork Co.
Machine Gun Section
— Left England for South Africa on the "Aurania."

,, ,, Brigade Division Staff 1st Division R.F.A.
7th Battery R.F.A.
14th Battery R.F.A.
66th Battery R.F.A.
Ammunition Column, 1st Division
Field Troop R.E.
Detachment No. 19 Company R.A.M.C. (F.H.)
— Left England for S. Africa on the "Armenian."

,, ,, Remounts
Detachment No. 9 Company R.A.M.C. (1st Cavalry Brigade F.H.)
10th (Railway) Company R.E.
17th (Field) Company R.E.
— Left England for South Africa on the "Nomadic."

,, ,, Major-General Yule evacuated Glencoe and marched south to join Sir George White at Ladysmith.

,, ,, Major-General Sir W. P. Symons, K.C.B., died at Dundee of a wound received there.

24th (T.) Kimberley Garrison engaged enemy at Riverton Road Station. Boer force dislodged and Commandant Botha killed. British casualties 24.

,, ,, Sir George White defeated the enemy at Rietfontein. British casualties, 110. Boer casualties 280.

,, ,, Nos. 1, 2, 3, and 5 Companies Army Ordnance Corps arrived at Cape Town from England on the "Mexican."

,, ,, 2nd Bn. Cameron Highlanders left England for Gibraltar on the "Malta."

,, ,, Two Squadrons 5th Dragoon Guards arrived at Durban from India on the "Virawa" and "Patiala."

,, ,, R Battery R.H.A.
1st Cavalry Brigade
Ammunition Column
Detachment Field Troop R.E.
Detachment No. 9 Company R.A.M.C. (Bearer Company)
— Left England for South Africa on the "America."

24th (T.) 4th Brigade Staff
1st Bn. Durham Light Infantry
No. 3 Company R.A.M.C. (F.H.)
Mounted Infantry, Dublin Company
Mounted Infantry, Eastern Company
Machine Gun Section
No. 6 Company R.A.M.C. (F.C.)
Details A.O.C.
} Left England for South Africa on the "Cephalonia."

25th (W.) The 18th and half the 75th Batts. Royal Field Artillery arrived at Cape Town from England on the "Zayathla."

" " 1st Bn. Argyll and Sutherland Highlanders left England for South Africa on the "Orcana."

26th (Th.) Major-General Yule joined hands with Sir George White at Ladysmith.

" " 2nd Bn. Rifle Brigade arrived at Durban from Crete on the "Jelunga."

" " One General Hospital Corps, 3 Companies Army Ordnance Corps, and 20 Companies Army Service Corps arrived at Cape Town from England on the "Braemar Castle."

" " 2nd Bn. Royal Irish Rifles
Det. No. 16 Company R.A.M.C.
} Left Ireland for S. Africa on the "Britannic."

" " 2nd Bn. Derbyshire Regiment arrived at Malta from Aden on the "Dunera."

27th (F.) Proclamation by H.M. the Queen calling out the Militia and Militia Reserve.

" " 1st Bn. Rifle Brigade
28th Field Company R.E.
1st Field Park, R.E.
Det. No. 3 Company R.A.M.C.
} Left England for South Africa on the "German."

" " O Batt. R.H.A.,
Ammunition Column 2nd Cavalry Brigade
Det. No. 12 Company R.A.M.C.
} Left England for South Africa on the "Glengyle."

28th (Sat.) 2nd Bn. Cameron Highlanders arrived at Gibraltar from England on the "Malta."

" " Brigade Division Staff R.H.A.
G and P Batts. R.H.A.
Detachment Ammunition Column 2nd Cavalry Brigade
Detachment No. 5 Company R.A.M.C.
} Left England for South Africa on the "Pindari."

" " One Squadron 6th Dragoon Guards (Carabiniers)
Detachment No. 2 Stationary Hospital
} Left England for South Africa on the "Persia."

" " The New South Wales Contingent (3 officers and 37 Lancers, 6 officers and 80 men, Medical Corps and 189 horses) left Sydney for South Africa on the "Kent."

30th (M.) H.M.S. "Champion" paid of at Sheerness.

" " H.M.S. "Raleigh" paid off at Portsmouth.

" " The Canadian Contingent (1,000 Infantry) left Quebec for South Africa on the "Sardinian."

" " The Royal Dragoons left England for South Africa on the "Manchester Port."

" " 62nd and half 75th Batts. Royal Field Artillery arrived at Cape Town on the "Zibeughla."

" " General the Rt. Hon. Sir Redvers Buller, G.C.B., K.C.M.G., V.C., and Staff, and the Army Post Office Corps arrived at Cape Town from England on the "Dunottar Castle."

30th (M.) Sir George White made a reconnaissance in force from Ladysmith. British Force casualties 300. Two British regiments (1st Bn. Royal Irish Fusiliers, and 1st Bn. Gloucestershire Regiment) and No. 10 Mountain Battery were surprised and captured by the Boers owing to failure of ammunition. Boer casualties about 600.

31st (Tu.) H.M.S. "St. George" commissioned at Portsmouth for Particular Service Squadron.

" " H.M.S. "Minerva" commissioned at Chatham for Particular Service Squadron.

" " H.M.S. "Volage" and "Cleopatra" paid off at Devonport.

" " The French Bretonnet Mission reported to have been attacked and cut up by Rabah.

" " 11th Hussars arrived in Egypt from India on the "Simla."

" " 21st Lancers left Egypt for England on the "Simla."

" " The Victorian Contingent (125 Mounted Infantry and 125 Infantry)
The Tasmanian Contingent (80 Infantry)
South Australian Contingent (250 Infantry) } Left Adelaide for South Africa on the "Medic."

" " Boer attack on Mafeking repulsed with heavy loss.

FOREIGN PERIODICALS.

NAVAL.

ARGENTINE REPUBLIC.—*Boletín del Centro Naval.* Buenos Aires: September, 1899.—Has not been received.

AUSTRIA-HUNGARY.—*Mittheilungen aus dem Gebiete des Seewesens.* No. 11. Pola: November, 1899.—Has not been received.

BRAZIL.—*Revista Maritima Brazileira.* Rio de Janeiro: August, 1899.—"Historical Documents." "The Chino-Japanese War from the Point of View of International Law" (*continued*). "Practical Guide to the South Coast of Brazil" (*continued*). "Contributions to a Course of Naval History."

FRANCE.—*Revue Maritime.* Paris: August, 1899.—"A Study on the New Constructions in France and Abroad." "A Note on the Probable Loss of Guns in Action." "The Effective Force a Ship-of-war can Land." "The Capture of Ilo-Ilo." "Naval War and its Lessons." The Tribunals and Courts of Honour in the German Navy." "Project for a Naval Reserve in the United States." "Re-organisation of the *personnel* of the United States Navy." "The New U.S. Naval Academy at Annapolis." "Italian Arsenals." "Portuguese Gun-boats." "Naval Notes." "The Mercantile Marine."

Le Yacht. Paris: 7th October, 1899.—"The English Ship-owners and the Ship-brokers in France." "Yachting Notes." "Sports in the English Army." 14th October.—"Our Naval Divisions and the Budget for 1900." "Yachting Notes." "The Grade of Captain of Corvette." "The Henry Life-boat." "The Merchant Navy, French and Foreign." 21st October.—"The Red Cross at Sea." "Yachting Notes." "The Increase in Displacement of Merchant-Ships." 28th October.—"The Launch of the 'Narval.'" "Yachting Notes." "The Red Cross at Sea" (*continued*). "An Atlas of Submarine Lithology for the French Coasts." "The Merchant Navy, French and Foreign."

Le Moniteur de la Flotte. Paris: 7th October, 1899.—"The Cadets on board the 'Borda.'" "The Naval Estimates for 1900." 14th October.—"The Works

for the Commercial Harbours." "M. De Lanessan Visits of Inspection." "The Canal des Deux Mers." 21st October.—"Odious Favoritism." "The Canal des Deux Mers." "Colonial Notes." 28th October.—"Dry Docks and the Plant at the Dockyard." "Colonial Notes." "The Fisheries and Ostriculture."

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GERMANY.—*Marine Rundschau.* Berlin: October, 1899.—"An Episode in the Fighting between the Spanish Armada and England." "The Theoretical Basis for Experiments in regard to Ships." "The Construction of the Thornycroft Water-tube Boilers at the Thornycroft Works." "Translation of some Important Extracts from the chapter on "Seamanship" in Kemp's 'Manual of Yacht and Boat Sailing.'" "Some short Remarks on Photographing on board Ship." "The Invincible Armada." "The Danzig Dockyard." "H.I.M.S. 'Falke' among the East Caroline Islands." "The Action between the 'Météor' and 'Bouvet' on 9th November, 1870." "The Survey of Kiautschou." "Proverbs and Proverbial Methods of Speed about Seamanship, and Sea and Fishing Life in the German Language."

ITALY.—*Rivista Marittima.* Rome: October, 1899.—"Nautical Qualities of War-ships." "Emigration Agencies." "Naval Construction and Hygiene." "Some Notes on Firing." Letters to the Director:—"Economy in the Arsenals." "On the New Problems of Naval Tactics." "Unification of the Units of Measurement." "Naval Notes." "The Mercantile Marine."

PORTUGAL.—*Revista Portugueza, Colonial e Maritima.* Lisbon: September, 1899.—"The Marquis de Pombal and the English Alliance" (*concluded*). "Colonial Agriculture" (*continued*). "The Colonial Course of Instruction." "Proposed New Uniform for the Colonial Army." "Local Attraction and Magnetic Needles."

October, 1899.—"The Portuguese and the Atlantic." "Colonial Agriculture" (*continued*). "Exploration in the Benguella District." "On the Rats of the Island of St. Thomas." "Naval Notes."

SPAIN.—*Revista General de Marina.* Madrid: October, 1889.—"Coast Defence" (*continued*). "From the North Cape to Yugar." "The Mounting of Marine Engines." "The Engineer of the Fleet." "The Society of Mechanical Engineers" (*continued*). "The Circulation in the Niclausse Boilers." "Some Studies of the Medical Service on board Ships, in the Expectation of War" (*continued*). "The Practical Masters of Torpedo-boats."

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MILITARY.

AUSTRIA-HUNGARY.—*Militär-Zeitung.* Vienna: 7th October, 1899.—"Disciplinary Measures against Officers." "England and the Transvaal." 15th October.—"The War in Africa." "Changes in Regulation and the Pay Question."

"Once More on the Education of Recruits." "The Austrian and German Manœuvres." 23rd October.—"About Perquisites." "The War in Africa" (*continued*). 31st October.—"On the Increase in the Recruit Contingent." "About Perquisites" (*continued*). "The War in Africa" (*continued*). "Commentary on November Promotions."

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Colonel Baden-Powell is such an authority on Scouting, that anything written by him on the subject is sure to command attention. Additional interest is added to this book from the fact that the proofs of it were corrected at Mafeking before the place was besieged by the Boers. The hints are most valuable and practical, for they are founded on the personal experiences of the author. The book is handy in size, can easily be carried in the breast pocket, and should prove of great value to all officers, non-commissioned officers, and men who are anxious "to take a distinguished part in the best sport in the world, namely, Scouting."

The Boer War, 1899. By Lieut.-Colonel H. M. E. BRUNKER. Pamphlet. London: William Clowes and Sons, Ltd.

This is a very useful pamphlet and enables all interested in the Boer war to see at a glance the composition and distribution of the British forces in Africa. It contains a list of the various staffs, the officers of regiments, battalions, batteries, etc., a diary of the present campaign, and an excellent map of the scene of operations. Altogether it is a most excellent idea and is sure to be popular.

Organization and Equipment made Easy. By Captain S. T. BANNING, *p.s.c.*, 1st Royal Munster Fusiliers. Crown 8vo. Aldershot, 1899.

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